2007 Fort Valley State University and University of Georgia Combined Research and Extension Annual Report

Status: Accepted
Date Accepted: 07/21/08

2007 Fort Valley State University and University of Georgia Combined Research and Extension Annual Report

I. Report Overview

1. Executive Summary

This executive summary will provide background information regarding the state of Georgia and the development of Georgia Report of Accomplishments. There will be a few program highlights and brief summaries for each of the nineteen planned programs.

BACKGROUND

Fort Valley State University and The University of Georgia address major agricultural issues as well as many other problems facing rural and urban areas, the environment, families and youth. This Accomplishment Report represents the coordinated effort between the state's 1890 and 1862 institutions -- Fort Valley State University (FVSU) and the University of Georgia (UGA), and includes joint planning between Experiment Stations and Extension units at both universities.

Georgia, one of the original thirteen colonies, has a land area of 57,919 square miles, which makes it the largest state east of the Mississippi River (24th overall). The total area of the state's three largest counties - Ware, Burke, and Clinch (2,565 square miles) - is greater than the area of the entire state of Delaware (2,489 square miles). Georgia falls within five major physiographic regions: the Blue Ridge Mountains in the northeast, the Ridge and Valley Province and the Cumberland Plateau in the northwest, the Piedmont across Georgia's center, and the Coastal Plain in the south. Elevations range from sea level to 4,784 feet at Brasstown Bald in the Blue Ridge Mountains.

As the twenty-fourth largest state, Georgia's 2005 population was 9,072,576. The 2005 population listed in the 2007 Georgia County Guide reported 28.84% of Georgians were age 19 or younger and 9.59% of the state's population was 65 or older. Of the state's citizens, the 2007 Georgia County Guide reported that in 2005, 67% of Georgians were of white descent, 28% were of African American descent, 8% were of Hispanic descent. From 2000 to 2005 there has been a substantial increase in the Hispanic/Latino descent from 5.3% in 2000 to 8% in 2005.

The Georgia Extension Service has 160 offices in 158 of Georgia's 159 counties. FVSU and UGA county personnel are housed jointly in county offices. Extension programming is delivered as both individual county effort and as multi-county programming. State faculty also deliver programming directly to clientele when appropriate. The research programs of FVSU and UGA are conducted through the Agricultural Experiment Stations system. In addition to Georgia's four main campuses located in Athens, Fort Valley, Tifton and Griffin, Georgia utilizes several research and education centers located strategically throughout the state. This joint Accomplishment Report was developed around core programs and targeted issues. The programming directions of core programs and the identification of targeted issues are decided under a structured program development system. The Georgia program development model is a multiple step process that is operational every year. The model includes a process for assessing needs and identifying problems. It also includes program evaluation to determine impact. The Georgia program development model works in unison with multiple advisory systems at both county and state levels.

The Georgia Federal Plan of Work does not attempt to capture all of the work of the colleges' faculty members. It is intended to document the plans and actions of the faculty members receiving specific formula funds. The majority of these dollars are used to fund core programs at the state level. These core programs range from the traditional animal and plant production to the emerging issue of biofuels. The goals of these programs are to demonstrate short and long-term impact. However, the greatest impacts of these core programs are the foundations created to support and leverage additional resources beyond state matching funds.

HIGHLIGHTS

Georgia is involved in many significant programs that positively impact the citizens of the state, the economy, the business arena and the environment. Just a few examples of both small and large programming will be highlighted here.

Master Cattlemen's Program:

The University of Georgia's "Beef Team" is currently offering the Master Cattlemen's Program. This program involves detailed, in-depth educational seminars related to beef cattle. A maximum of two programs will be offered annually throughout the state. Participants who attend a minimum of five of the seven consecutive Monday night meetings will receive a certificate of completion. Each meeting includes two one-hour topics by specialists from the University of Georgia. These topics may include:

Report Date 03/09/2009 Page 1 of 133

record-keeping, economics, nutrition, forages, fly control, reproduction, genetics, breeding, facilities and herd health. To be competitive in the beef market, producers must understand existing beef management practices as well as become informed of new technologies as they are developed. Beef producers who wish to learn more about beef production may attend meetings that are designed to reach a large section of the population; however, the depth at which these programs can cover may be limited. To learn advanced production practices and details related to upcoming technologies, the Master Cattlemen's Program was developed. This program involves advanced lectures from State Specialists that extend beyond the usual general explanation.

Urban Agriculture:

Urban Agriculture programming reported over 2,000 direct contacts and over 300,000 indirect contacts due to the direct result of faculty receiving federal funds. These federal funded positions, in turn, provided further impact to the community through faculty, staff and volunteers not receiving federal funds. This county level programming resulted in almost 400,000 additional direct extension contacts in the area of ANR programming for urban audiences. 2,955 training sessions were provided. Agricultural county level programming held in the metro areas of Georgia generated over 3 million educational contacts hours for FY '07. Georgia has 70 counties that are considered metropolitan according to the UGA CAES Center for Urban Agriculture.

Some examples of urban Ag programming are: the Master Gardener program, research in breeding landscape plants, water conservation in greenhouses, GPS technology for Landscape professionals and economic development issues.

One urban ag initiative is the Master Gardener training program. This program is primarily conducted in the spring and fall on a yearly basis. Classes are typically 2 hours long and meet twice per week for 10 weeks. Participants are required to attend at least 80% of the classes and must pass 2 written exams. After training, the Georgia Master Gardener Intern must complete 50 hours of volunteer service with Cooperative Extension within the first year. To remain active, a Master Gardener must contribute 25 hours of community volunteer service each year thereafter.

Potential Master Gardener volunteer activities are identified in close partnership with County Extension Agents and are based on community needs. Through these activities, Master Gardeners are encouraged to take an active role in improving community and environmental quality, as well as promoting sustainable gardening practices. Master Gardeners are not intended to provide free gardening labor or consultant services. And, though their mission is primarily as volunteer educators, they truly enjoy being involved in their communities and "getting their hands in the dirt" as evidenced by the many hours volunteered at Extension demonstration gardens each year.

Housing and the Near Environment:

Faculty associated with federal funds reported over 500 direct contacts and over 15,000 indirect contacts. These federal funded positions, in turn, provided further impact to the community through faculty, staff and volunteers not receiving federal funds. This county level programming resulted in 25,847 additional direct extension contacts in the area of FACS housing programming for the residents of Georgia. 329 training sessions were provided. Safe and affordable housing programming at the county level generated 15,524 educational contacts hours for FY '07.

A series of homebuyer education workshops were offered throughout the year. The program is intended to raise awareness of assistance that is available for homeownership needs. In addition to these periodic workshops a statewide housing conference is held once a year. The intended audience for the statewide housing conference is other housing professionals in the field. These professionals learn about current rural housing needs, financial resources, and technical resources available for them to use with their clientele. State faculty also created training materials for county agents to use in their communities. A few example topics for training materials are: home buying, home maintenance, indoor air quality, managing water and utility education. The downward turn in the economy has created an increased demand for this type of programming as clients are concerned about predatory lenders, loan defaults, saving money, and maintaining a healthy home.

PLANNED PROGRAM SUMMARIES

There are nineteen planned programs for FVSU and UGA. Below is a brief summary of each planned program.

1) Agriculture and Food Defense Program / Agrosecurity – Programming efforts support the State Strategic Plan for Terrorism and All-Hazards Preparedness through participation in the Georgia Committee on Agriculture and Food Defense. This program leads the County Agriculture Response Teams (CART) and will develop and deliver agro- and bio-security education to citizens through the county extension office.

Report Date 03/09/2009 Page 2 of 133

- 2) Animal Production and Protection This program area explores different areas of animal production and protection, focusing on the production of sheep, goats, dairy and beef cattle and swine. Specific topics for this program include, but are not limited to: Georgia Beef Challenge, Master Cattleman's Program, profitability of dairy farming, swine intake regulation, pest control and evaluation of new forages and feeds.
- 3) Aquaculture This program area supports the research and promotion of different aspects of aquaculture, including catfish and freshwater prawn production, disease diagnosis services, water quality and aquatic weed identification and re-circulating aquaculture systems.
- 4) Biorefinery and Carbon Cycling Program Programming supports research projects that improve existing technology and identify new emerging technologies in the following areas: hydrogen production from peanut hulls and pine chips biomass, use of char in agriculture and BioOil and biodiesel development.
- 5) Chronic Disease Prevention / Healthy Lifestyles Programming in this area brings awareness to and researches the issues of chronic disease prevention and healthy lifestyles by disseminating fact sheets on weight control, physical activity, diabetes management and prevention, cardiovascular diseases prevention and cancer prevention to the public. A large focus of this program will be on the state's youth, with statewide classes and meetings being held which will focus on healthy lifestyles.
- 6) Consumer Economics and Financial Literacy In this program, UGA specialists disseminate personal financial literacy fact sheets, provide personal financial management education classes to agents and select clientele, and provide information to be disseminated by agents to media outlets. FVSU faculty will also develop a long range plan for early intervention in financial literacy and consumer education in targeted areas throughout Georgia.
- 7) Food Processing, Protection & Safety Projects include analyzing consumer demand for food, workshops and short courses for food industry, research studies in food processing, development of models and publishing of journal papers and other media.
- 8) Housing and the Near Environment In this program, faculty develop and disseminate information on indoor air quality, water quality, waste management and energy management. This program also includes a homebuyer education program, which teaches clientele how to transition from a renter, how to buy a home and how to keep a safe, how to maintain a healthy home environment.
- 9) Managing Water, Energy, Waste and Air Quality in Agriculture this program focuses on the research and dissemination of information related to the areas of managing water, energy, waste and air quality in agriculture. Specific research areas will include, but are not limited to: water quality management, animal waste management, nutrient management, irrigation water management under the agricultural pollution control program, watershed management, treatment and utilization of animal manures, and reducing ammonia emissions in poultry production.
- 10) Meat and Dairy Goat Production and Processing Program efforts identify the niche market of goat meat. This program also identifies the attributes and types and of goat meat, cheese and milk products. Studies are conducted to determine the effects of preslaughter dietary treatment duration of feeding and spray washing on different areas of Chevon production.
- 11) New Product Development / Genomics and Cultivar Development In this program, researchers will conduct basic and applied research to understand the genetics of traits of agronomic importance and the performance of potential genotypes under field conditions, with an emphasis on crops/plants of current or potential importance to Georgia. Researchers develop new cultivars, with emphasis on plants of current or potential importance to Georgia, which manifest improved performance or manifest value-added traits.
- 12) Plant Production and Protection –Research carried out in the laboratory, greenhouse, experimental farms and in collaboration with commercial producers.
- 13) Poultry Production and Protection This program focuses on developing management methods to improve egg production, fertility and hatchability. Field research will be conducted to develop improved energy efficiency and conservation techniques. In addition, educational meetings about bird health, avian influenza and human health will be conducted with poultry farmers and industry representatives. Education materials for each research area will be distributed to select clientele.
- 14) Quality Caregiving for Children and Youth Various programs on enhancing parenting/care giving skills are provided. Health, home maintenance and community service are the research and outreach topics. This program will offer conferences for senior citizens, childcare providers and youth. This program will also disseminate parenting fact sheets, age-paced newsletters and information on early brain development, provide parenting and child care provider education classes to agents and select clientele.
- 15) Specialty Plants Technology Selected specialty plants, those with medicinal, nutraceutical and biofuel values, are studied for their invitro plant regeneration and genetic enhancement value-added traits including quality and quantity of phytomedicines, healthy nutrients, and biofuels. Different species of useful plants and animals will be grown / managed in an ecologically sound biological village system using environmentally sound management to develop it into a self-sustaining system on limited resources for improving quality of life for Americans.
- 16) Sustainability and Profitability of Agriculture Issues addressed through this planned program, relate to the sustainability and profitability of agriculture, including, but not limited to: management, financial accounting and reporting strategies; alternate cultural practices that will protect, improve and maintain soil fertility; minimum tillage and cover crops; issues related to urban agriculture; value added products or production practices that can improve sustainability and profitability; investigation of niche markets in Georgia.

Report Date 03/09/2009 Page 3 of 133

- 17) Technology Education for Seniors Low intensity computer training classes are offered at the county level. Topics include: "Introduction to Computers," "Introduction to the Internet," "Introduction to Email," "Introduction to MS Word" and others as the needs assessment dictate.
- 18) Urban Agriculture This program focuses on issues related to urban agriculture, including, but not limited to: breeding programs that incorporate variability derived from interspecific hybrids to greatly enhance the genetic pool from which new cultivars can be developed; water conservation technology and training; turf disease identification and management; development of new cost estimating and job bidding software for landscape installation; Master Gardner programs.
- 19) Youth Life Skill Development This program will focus on issues related to 4H and youth life skill development. 4H faculty members develop curriculum, train and support county extension agents to conduct monthly educational programs for in-school club meetings around the state. They develop and support educational opportunities including individual learning projects and clubs and summer camping programs. A Georgia Youth Summit is held, which will bring youth and adults together to discuss and train on local issues effecting their communities. The Operation Military Kids Team was created to meet the needs of military youth and families who do not fit in the traditional military family system. A large part of this program will fund specialists research, outreach and their direct efforts primarily to county agents.

Total Actual Amount of professional FTEs/SYs for this State

Year: 2007	Extension	Extension		Research	
1 ear . 2007	1862	1890	1862	1890	
Plan	44.8	9.0	46.0	15.0	
Actual	89.6	8.4	46.0	24.9	

II. Merit Review Process

1. The Merit Review Process that was Employed for this year

- Internal University Panel
- External University Panel
- Combined External and Internal University External Non-University Panel
- Expert Peer Review

2. Brief Explanation

The program development team met four times during this year to review plans of work and redirect resources as needed. All research projects conducted during this year were peer reviewed by both internal and external reviewers. In addition, greater than twenty percent of approved research projects are also associated with multistate/integrated projects which undergo an extensive review by the Southern Association of Agricultural Experimental Station Directors.

III. Stakeholder Input

1. Actions taken to seek stakeholder input that encouraged their participation

- Use of media to announce public meetings and listening sessions
- Targeted invitation to traditional stakeholder groups
- Targeted invitation to non-traditional stakeholder groups
- Targeted invitation to traditional stakeholder individuals
- Targeted invitation to non-traditional stakeholder individuals
- Survey of traditional stakeholder groups
- Survey of traditional stakeholder individuals
- Survey specifically with non-traditional groups

Brief Explanation

After visiting with local advisory committees, county agents responded to a statewide survey. The data from this survey was analyzed by the state program development team and recommendations were made to state faculty for next year's programming.

2(A). A brief statement of the process that was used by the recipient institution to identify individuals and groups stakeholders and to collect input from them

1. Method to identify individuals and groups

Report Date 03/09/2009 Page 4 of 133

- Use Advisory Committees
- Open Listening Sessions
- Needs Assessments
- Use Surveys

Brief Explanation

Statewide stakeholders and potential collaborators were identified by faculty and recommendations were made to the Dean for statewide advisory committees. The counties used a structured identification process to select a diverse advisory committee at the local level. The majority of counties reassessed their advisory committee membership this year.

External review teams have also provided suggestions as to new classifications of stakeholders, especially in regard to "departmental" advisory committees. The most dramatic changes in the research programs of the College occur when new faculty are hired. Departmental advisory committees help prioritize the needs of the stakeholders. Stakeholder input is also sought by members of search and screen committees prior to selecting candidates to interview and prior to the final recommendation.

2(B). A brief statement of the process that was used by the recipient institution to identify individuals and groups who are stakeholders and to collect input from them

1. Methods for collecting Stakeholder Input

- Meeting with traditional Stakeholder groups
- Survey of traditional Stakeholder groups
- Meeting with traditional Stakeholder individuals
- · Survey of traditional Stakeholder individuals
- Meeting with the general public (open meeting advertised to all)
- Meeting specifically with non-traditional groups
- Survey specifically with non-traditional groups
- · Meeting with invited selected individuals from the general public

Brief Explanation

Individual county level advisory committees met at least two times during the year. One ANR and one youth development statewide survey was conducted to collect county input. The statewide CAES advisory committee met two times during the year. With the Archway Program, we invite individuals from the general public to participate in needs assessment and use for both Cooperative Extension and VPPSO programming.

3. A statement of how the input was considered

- · In the Budget Process
- To Identify Emerging Issues
- Redirect Extension Programs
- Redirect Research Programs
- · In the Staff Hiring Process
- In the Action Plans
- To Set Priorities

Report Date 03/09/2009 Page 5 of 133

Brief Explanation

All input is channeled to college administration so they have the knowledge to make budgetary decisions. All vacant positions in all departments are brought to college level administration for evaluation based on these criteria before a decision is made to refill. Or positions may be redirected as needed. The Dean solicits input from all faculty, staff and stakeholders prior to making hiring decisions on major administration positions.

Brief Explanation of what you learned from your Stakeholders

- •Research efforts of the College must be balanced to both meet the needs of stakeholders, communities and the economic and environmental sustainability of the state.
 - •National reputation is important provided the local needs are being addressed.
- •Stakeholders are seeking a greater partnership with the College and are willing to contribute their time, talent and resources to build the <u>overall</u> College. Most are placing the long term survival and enhancement of the College above the needs of their particular operation, organization or community. They want to be part of the solution knowing that as the total College becomes stronger, all segments of our stakeholders will benefit.

IV. Expenditure Summary

Total Actual Formula dollars Allocated (prepopulated from C-REEMS)					
Extension		Rese	arch		
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen		
7408021	2081390	8123145	2402808		

2. Totaled Actual dollars from Planned Programs Inputs					
Extension			Research		
	Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen	
Actual Formula	7408021	2081390	8123145	2402808	
Actual Matching	7408021	2081390	8123145	2402808	
Actual All Other	0	0	0	0	
Total Actual Expended	14816042	4162780	16246290	4805616	

3. Amount of Above Actual Formula Dollars Expended which comes from Carryover funds from previous years				
Carryover	0	0	0	0

Report Date 03/09/2009 Page 6 of 133

V. Planned Program Table of Content

S. NO.	PROGRAM NAME
1	Food Processing, Protection & Safety
2	Technology Education for Seniors
3	Biorefinery and Carbon Cycling Program
4	Chronic Disease Prevention / Healthy Lifestyles
5	Animal Production and Protection
6	Consumer Economics and Financial Literacy
7	Poultry Production and Protection
8	Aquaculture
9	Quality Caregiving for Children and Youth
10	Plant Production and Protection
11	Youth Life Skill Development
12	Housing and the Near Environment
13	Sustainability and Profitability of Agriculture
14	Agriculture and Food Defence Program / Agrosecurity
15	Managing Water, Energy, Waste and Air Quality in Agriculture
16	New Product Development / Genomics and Cultivar Development
17	Urban Agriculture
18	Speciality Plants Technology
19	Meat and Dairy Goat Production and Processing

Report Date 03/09/2009 Page 7 of 133

Program #1

V(A). Planned Program (Summary)

1. Name of the Planned Program

Food Processing, Protection & Safety

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
501	New and Improved Food Processing Technologies	12%	12%	12%	12%
503	Quality Maintenance in Storing and Marketing Food Products	13%	13%	13%	13%
601	Economics of Agricultural Production and Farm Management	4%	4%	4%	4%
607	Consumer Economics	2%	2%	2%	2%
609	Economic Theory and Methods	5%	5%	5%	5%
711	Ensure Food Products Free of Harmful Chemicals, Including	4%	4%	4%	4%
712	Protect Food from Contamination by Pathogenic Microorgani	24%	24%	24%	24%
722	Zoonotic Diseases and Parasites Affecting Humans	4%	4%	4%	4%
723	Hazards to Human Health and Safety	32%	32%	32%	32%
	Total	100%	100%	100%	100%

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Exter	Extension I		Research	
	1862	1890	1862	1890	
Plan	4.0	0.0	0.0	0.5	
Actual	8.0	0.3	1.6	6.8	

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
661430	59810	282545	636037
1862 Matching	1890 Matching	1862 Matching	1890 Matching
661430	59810	282545	636037
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Report Date 03/09/2009 Page 8 of 133

The activities of this planned program included:

- •Projects to analyze consumer demand for food
- ·Workshops and short courses for food industry
- Research studies of food processing industry
- Development of models
- •Publishing of journal papers and other media.

2. Brief description of the target audience

Food industry managers, quality assurance, HACCP coordinators, microbiologists, third-party auditors, government inspectors, county extension agents

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

Year	Direct Contacts Adults Target	Indirect Contacts Adults Target	Direct Contacts Youth Target	Indirect Contacts Youth Target
Plan	225	15	0	0
2007	2250	15000	0	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year Target

Plan: 0 2007: 0

Patents listed

3. Publications (Standard General Output Measure)

	Extension	Research	Total
Plan			
2007	0	0	0

V(F). State Defined Outputs

Output Target

Report Date 03/09/2009 Page 9 of 133

Output #1

Output Measure

Educational contacts hours (number of students X teaching hours) from workshops to clientele

 Year
 Target
 Actual

 2007
 6000
 2261

Output #2

Output Measure

Number of significant publications

Year	Target	Actual
2007	8	23

Output #3

Output Measure

Number of research projects completed on dairy goat development, food quality and economic evaluation.

Year	Target	Actua
2007	1	3

Output #4

Output Measure

Number of persons taking and passing the HACCP certification exam.

Year	Target	Actua	
2007	660	57	

Output #5

Output Measure

Number of educational contact hour generated from formal educational programs presented to county extension agents by sta

Year	Target	Actual	
2007	{No Data Entered}	842	

Report Date 03/09/2009 Page 10 of 133

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O No.	Outcome Name
1	Reduction of incidence of foodborne illness due to better training methods on handling and processing food safety.
2	Placement of gradutate students in food related industry, government agencies or institutions of higher education.
3	Number of invited presentations at professional society meetings

Report Date 03/09/2009 Page 11 of 133

Outcome #1

1. Outcome Measures

Reduction of incidence of foodborne illness due to better training methods on handling and processing food safety.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
501	New and Improved Food Processing Technologies
607	Consumer Economics
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occuring Toxi
601	Economics of Agricultural Production and Farm Management
609	Economic Theory and Methods
722	Zoonotic Diseases and Parasites Affecting Humans
723	Hazards to Human Health and Safety
711	Ensure Food Products Free of Harmful Chemicals, Including Residues from Agricultural and Other Sourc
503	Quality Maintenance in Storing and Marketing Food Products

Outcome #2

1. Outcome Measures

Placement of gradutate students in food related industry, government agencies or institutions of higher education.

2. Associated Institution Types

- •1862 Extension
- •1862 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	1	0

3c. Qualitative Outcome or Impact Statement

Report Date 03/09/2009 Page 12 of 133

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
723	Hazards to Human Health and Safety
607	Consumer Economics
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occuring Toxi
722	Zoonotic Diseases and Parasites Affecting Humans
501	New and Improved Food Processing Technologies
601	Economics of Agricultural Production and Farm Management
609	Economic Theory and Methods
711	Ensure Food Products Free of Harmful Chemicals, Including Residues from Agricultural and Other Sourc
503	Quality Maintenance in Storing and Marketing Food Products

Outcome #3

1. Outcome Measures

Number of invited presentations at professional society meetings

2. Associated Institution Types

•1890 Research

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	1	2

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
607	Consumer Economics
501	New and Improved Food Processing Technologies
722	Zoonotic Diseases and Parasites Affecting Humans
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occuring Toxi
601	Economics of Agricultural Production and Farm Management
723	Hazards to Human Health and Safety
609	Economic Theory and Methods
711	Ensure Food Products Free of Harmful Chemicals, Including Residues from Agricultural and Other Sourc
503	Quality Maintenance in Storing and Marketing Food Products

Report Date 03/09/2009 Page 13 of 133

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Economy
- Government Regulations
- Competing Programatic Challenges

Brief Explanation

Increase in fuel reduces the overall attendance in programs. Foodborne illness outbreaks in spinach and cantaloupe have brought new participants.

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- After Only (post program)
- Retrospective (post program)

Evaluation Results

Key Items of Evaluation

Report Date 03/09/2009 Page 14 of 133

Program #2

V(A). Planned Program (Summary)

1. Name of the Planned Program

Technology Education for Seniors

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area		%1890 Extension	%1862 Research	%1890 Research
802	Human Development and Family Well-Being	0%	50%	0%	0%
903	Communication, Education, and Information Delivery	0%	50%	0%	0%
	Total	0%	100%	0%	0%

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Exter	Extension		Research	
	1862	1890	1862	1890	
Plan	0.0	0.5	0.0	0.0	
Actual	0.0	1.0	0.0	0.0	

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Exten	sion	Research	
Smith-Lever 3b & 3c 1890 Extension		Hatch	Evans-Allen
0	239240	0	0
1862 Matching	1862 Matching 1890 Matching		1890 Matching
0	239240	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Surveys were conducted in each of the six identified counties to access the true needs for Information Technology training. Curriculum based on the clientelle needs was developed. Low intensity training classes were offered in each county to include: "Introduction to Computers", "Introduction to the Internet", Introduction to Email", "Introduction to MS Word", and others as the needs accessment dictate. This hands-on training was enhanced by follow-up training via email.

2. Brief description of the target audience

The target audience consisted primarily of senior citizens and retirees. However, in cases where space is available, others will be allowed to enroll in a particular training.

Report Date 03/09/2009 Page 15 of 133

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

Year	Direct Contacts Adults Target	Indirect Contacts Adults Target	Direct Contacts Youth Target	Indirect Contacts Youth Target
Plan	100	500	0	О
2007	240	750	600	750

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year Target Plan: 0

2007: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

Extension		Research	Total	
Plan				
2007	0	0	0	

V(F). State Defined Outputs

Output Target Output #1

Output Measure

Number of educational contact hours generated from formal programs.

Year	Target	Actual	
2007	1080	750	

Report Date 03/09/2009 Page 16 of 133

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O No.	Outcome Name
1	Percent of program participants will able to send and receive email at the completion of training

Report Date 03/09/2009 Page 17 of 133

Outcome #1

1. Outcome Measures

Percent of program participants will able to send and receive email at the completion of training

2. Associated Institution Types

•1890 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual	
2007	80	100	

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
903	Communication, Education, and Information Delivery
802	Human Development and Family Well-Being

V(H). Planned Program (External Factors)

External factors which affected outcomes

• Other (Repairs to mobile unit)

Brief Explanation

Renovations done to mobile unit took it out of service for the last two months of the year. New employee brought in to provide trainings.

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

During (during program)

Evaluation Results

Key Items of Evaluation

Report Date 03/09/2009 Page 18 of 133

Program #3

V(A). Planned Program (Summary)

1. Name of the Planned Program

Biorefinery and Carbon Cycling Program

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code Knowledge Area		%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
133	Pollution Prevention and Mitigation	33%	0%	33%	0%
403	Waste Disposal, Recycling, and Reuse	33%	0%	33%	0%
605	Natural Resource and Environmental Economics	34%	0%	34%	0%
	Total	100%	0%	100%	0%

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Exter	nsion	Research	
	1862	1890	1862	1890
Plan	1.0	0.0	2.0	0.0
Actual	2.0	0.0	2.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Exter	nsion	Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
165358	0	353180	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
165358	0	353180	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Report Date 03/09/2009 Page 19 of 133

Research projects were developed and conducted to improve on existing technologies and identify new and emerging technologies. Examples of research projects under development or implementation are discussed below. Many projects are currently underway or in the planning stages.

A project evaluating the production of hydrogen from peanut hull and pine chips biomass is underway. Peanuts and pine chips are plentiful in Georgia. Additional tests are beginning on the use of char in Agriculture. Two chars (peanut hulls and pine chips) produced from the process are being evaluated for nutrient benefits, water holding and irrigation benefits, and carbon sequestrations benefits.

BioOil has been developed by pyrolyzing pine pellets in a pilot scale system. Blends of BioOil with other solvents/fuels have been prepared and are being characterized. BioOil blend analysis and testing is ongoing. Plans for engine performance testing will begin soon.

The transesterfication of oils and fats to produce biodiesel is being studied. This work evaluates new sources of oils and fast that could be substrates for producing biodiesel. Once developed, the biodiesel will be tested for properties and behavior in engine testing. Georgia grasses are being hydrolyzed through a hot water extraction process to generate fermentable sugars. These will be further broken down before fermentation. The final sugar solution will be fermented for producing ethanol.

2. Brief description of the target audience

Farmers, agribusiness, community leaders, entrepreneurs

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	300	600	0	0
2007	700	1000	0	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year Target

Plan: 5 2007: 0

Patents listed

3. Publications (Standard General Output Measure)

Number	of Pa	r Revie	wed Pul	blications
Nullibel	UI PE	si nevie	weu ru	UIICALIUIIS

	Extension	Research	Total
Plan			
2007	0	0	0

V(F). State Defined Outputs

Output Target

Report Date 03/09/2009 Page 20 of 133

Output #1

Output Measure

Number of Significant Publications

Year	Target	Actua
2007	10	8

Output #2

Output Measure

• Number of educational contact hours generated from formal programs for county agent in-service training.

Year	Target	Actua
2007	30	70

Output #3

Output Measure

Number of educational contact hours generated from programs or workshop presented directly to clientele.

Year	Target	Actual
2007	500	600

Report Date 03/09/2009 Page 21 of 133

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O No.	Outcome Name
1	Percentage of program particpants reporting increased knowledge after program particpation
2	The develoment of successful commercial enterprizes using technology developed in this program.

Report Date 03/09/2009 Page 22 of 133

Outcome #1

1. Outcome Measures

Percentage of program participants reporting increased knowledge after program participation

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	75	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
403	Waste Disposal, Recycling, and Reuse
605	Natural Resource and Environmental Economics
133	Pollution Prevention and Mitigation

Outcome #2

1. Outcome Measures

The develoment of successful commercial enterprizes using technology developed in this program.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year Quantitative Target		Actual
2007	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Report Date 03/09/2009 Page 23 of 133

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
403	Waste Disposal, Recycling, and Reuse
605	Natural Resource and Environmental Economics
133	Pollution Prevention and Mitigation

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Public Policy changes
- Competing Public priorities
- Populations changes (immigration,new cultural groupings,etc.)

Brief Explanation

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- During (during program)
- Case Study

Evaluation Results

Key Items of Evaluation

Report Date 03/09/2009 Page 24 of 133

Program #4

V(A). Planned Program (Summary)

1. Name of the Planned Program

Chronic Disease Prevention / Healthy Lifestyles

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
703	Nutrition Education and Behavior	40%	0%	40%	0%
724	Healthy Lifestyle	35%	0%	35%	0%
806	Youth Development	25%	0%	25%	0%
	Total	100%	0%	100%	0%

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Exter	nsion	R	esearch
	1862	1890	1862	1890
Plan	2.0	0.0	4.0	0.0
Actual	4.0	0.0	4.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Exter	nsion	Research		
Smith-Lever 3b & 3c 1890 Extension		Hatch	Evans-Allen	
330175	0	706360	0	
1862 Matching	1890 Matching	1862 Matching	1890 Matching	
330175	0	706360	0	
1862 All Other	1890 All Other	1862 All Other	1890 All Other	
0	0	0	0	

V(D). Planned Program (Activity)

1. Brief description of the Activity

Disseminated fact sheets on weight control, physical activity, diabetes management and prevention, cardiovascular disease prevention and cancer prevention. Provided training about chronic disease prevention and control to agents and selected clientele. Provided information to be disseminated by agents to media outlets.

Conducted in school classes in a majority of Georgia's Counties. Conducted Food Product Development contest and local practice sessions as part of the 4-H program. Conducted Statewide youth meetings focusing on Healthy Lifestyles curriculum. As part of a new program, Healthy Lifestyles Ambassadors were trained on research and relevant information. 4-H Summer Camp Healthy Lifestyle classes were conducted.

Faculty conducted weight loss research.

Report Date 03/09/2009 Page 25 of 133

2. Brief description of the target audience

All citizens of Georgia with special emphasis on school age children and populations at high risk of chronic disease.

A large part of this program funded specialists and their direct efforts primarily to county agents. These agents then disseminated this information to adults and youth who were considered at risk for chronic diseases or who had already developed a chronic disease.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

Year	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Plan	Target 600	2000	Target 1020	Target 10000
2007	610	60	0	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year Target

Plan: 0 2007: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan			
2007	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

• Number of significant publications including referred journals articles, bulletins and extension publications.

Year	Target	Actua
2007	20	38

Output #2

Output Measure

Number of educational contact hours generated from formal educational programs or presentations for county extension agen

Year	Target	Actua
2007	260	229

Output #3

Output Measure

Number of educational contact hours generated from formal educational programs or presentations conducted for clientele.

Year	Target	Actua
2007	94	158

Report Date 03/09/2009 Page 26 of 133

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O No.	Outcome Name
1	Number of additional direct extension contacts made by county faculty not receiving federal funds, staff or volunteers as a direct outcome of the work of faculty receiving federal fund within this planned program.
2	Percent of people affected by diabetes that chose a lower fat, lower sodium or lower sugar food ingredient.
3	Percent of people at risk for cancer who chose a lower fat or lower sodium food item.
4	Amount of additional resources leveraged because of program success.
5	Number of invited presentations by faculty as a direct result of the success of this program.

Report Date 03/09/2009 Page 27 of 133

Outcome #1

1. Outcome Measures

Number of additional direct extension contacts made by county faculty not receiving federal funds, staff or volunteers as a direct outcome of the work of faculty receiving federal fund within this planned program.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	13000	96405

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development
724	Healthy Lifestyle

703 Nutrition Education and Behavior

Outcome #2

1. Outcome Measures

Percent of people affected by diabetes that chose a lower fat, lower sodium or lower sugar food ingredient.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	75	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Report Date 03/09/2009 Page 28 of 133

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
724	Healthy Lifestyle
806	Youth Development

703 Nutrition Education and Behavior

Outcome #3

1. Outcome Measures

Percent of people at risk for cancer who chose a lower fat or lower sodium food item

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	50	60

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior
724	Healthy Lifestyle
806	Youth Development

Outcome #4

1. Outcome Measures

Amount of additional resources leveraged because of program success.

2. Associated Institution Types

- •1862 Extension
- •1862 Research

Report Date 03/09/2009 Page 29 of 133

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development
703	Nutrition Education and Behavior
724	Healthy Lifestyle

Outcome #5

1. Outcome Measures

Number of invited presentations by faculty as a direct result of the success of this program.

2. Associated Institution Types

- •1862 Extension
- •1862 Research

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	2	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development
703	Nutrition Education and Behavior
724	Healthy Lifestyle

Report Date 03/09/2009 Page 30 of 133

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programatic Challenges
- Populations changes (immigration,new cultural groupings,etc.)

Brief Explanation

There was a decrease in funding and in training.

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- After Only (post program)
- Retrospective (post program)
- Before-After (before and after program)
- During (during program)

Evaluation Results

Key Items of Evaluation

Report Date 03/09/2009 Page 31 of 133

Program #5

V(A). Planned Program (Summary)

1. Name of the Planned Program

Animal Production and Protection

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
301	Reproductive Performance of Animals	16%	16%	16%	16%
302	Nutrient Utilization in Animals	15%	15%	15%	15%
303	Genetic Improvement of Animals	16%	16%	16%	16%
305	Animal Physiological Processes	8%	8%	8%	8%
306	Environmental Stress in Animals	5%	5%	5%	5%
307	Animal Management Systems	23%	23%	23%	23%
311	Animal Diseases	8%	8%	8%	8%
312	External Parasites and Pests of Animals	3%	3%	3%	3%
313	Internal Parasites in Animals	3%	3%	3%	3%
315	Animal Welfare/Well-Being and Protection	3%	3%	3%	3%
	Total	100%	100%	100%	100%

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Extension		Research	
	1862	1890	1862	1890
Plan	4.5	0.3	3.0	0.8
Actual	9.0	1.1	3.0	0.8

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
744109	358860	529770	146054
1862 Matching	1890 Matching	1862 Matching	1890 Matching
744109	358860	529770	146054
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Report Date 03/09/2009 Page 32 of 133

A bull testing program and heifer evaluation program was conducted at two locations per year in Georgia. The Georgia Beef Challenge evaluated calves for feedlot performance and carcass evaluation in commercial feedlots located in lowa.

The University of Georgia's "Beef Team" offered the Master Cattlemen's Program. This program involves detailed, in-depth educational seminars related to beef cattle. A maximum of two programs were offered annually throughout the state.

Faculty maintained a web site for the International Dairy Heat Stress Consortium. Regional workshops were held for producers and were conducted as requested by extension personnel across Georgia. Faculty assisted with the Commercial & Purebred Dairy Projects as well as other 4-H & FFA activities, including dairy evaluation & dairy quiz bowl. Dairy farms in Georgia participated in a financial research study. The financial performance results of this program were published and shared in an effort to increase farm profitability.

Studies were conducted to examine swine intake regulation. These added to our understanding of the key regulatory points that can be applied in the industry to improve efficiency and reduce cost of production. Studies examining the efficiency of nitrogen and phosphorous utilization were conducted concurrently that have the potential to reduce the environmental impact of animal agriculture.

Annually this program updated Extension agents and clientele in pest control, through one-on-one discussions, meetings, or publications. It provided pest overviews for organizations such as the Georgia Cattlemen's Association. Every year faculty updated eleven sections of the Georgia Pest Management Handbook and provided biennial estimation of pest losses in livestock and dairy production.

Research continues that compares different bahiagrass and bermudagrass. Evaluation of new forages including Coastcross II for grazing and hay quality; and, pigeon peas for grazing and for grain production for cattle feeding continues. By-product feeds are being evaluated for nutritional and economic value in beef production systems.

New scientific information was made available to scientific peers through the publication of original research articles in scientific journals. More applied knowledge was disseminated to the audience at large (producers, practicing veterinarians, extension personnel) by publishing results in journal articles or departmental research reports and by coordinating presentations with extension personnel.

2. Brief description of the target audience

The target audience was sheep, goat, beef & pork producers, dairymen, county agents, veterinarians, and industry professionals.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

Year	Direct Contacts Adults Target	Indirect Contacts Adults Target	Direct Contacts Youth Target	Indirect Contacts Youth Target
Plan	2500	20000	400	1600
2007	4335	28050	1075	2270

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year Target Plan: 0

2007: 0

Patents listed

Report Date 03/09/2009 Page 33 of 133

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan			
2007	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

• Number of significant publications including referred journal articles, bulletin and extension publications.

Year	Target	Actua
2007	12	57

Output #2

Output Measure

Number of educational contact hours generated from formal educational programs or presentations for county extension agen

Year	Target	Actua
2007	500	777

Output #3

Output Measure

Number of educational contact hours generated from formal eduational programs or presentations for clinentele.

Year	Target	Actual
2007	1500	724

Report Date 03/09/2009 Page 34 of 133

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O No.	Outcome Name
1	Number of additiional direct extension contacts made by county faculty not receiving federal funds, staff or
	volunteers as a direct result of the work of faculty receiving federal funds within this planned program.
2	Number of Master Cattlemen certifications granted through this planned program.
3	Increase in the farm gate value of livestock production in Georiga. Reported in millions of dollars.
4	Number of invited presentations by faculty as a direct result of the success of this program.
5	Percentage of program participants reporting increased knowledge after program participation.
6	Percentage of program participants responding to follow-up survey that indicate changing at least one production
	practice as a result of this program.

Report Date 03/09/2009 Page 35 of 133

Outcome #1

1. Outcome Measures

Number of additional direct extension contacts made by county faculty not receiving federal funds, staff or volunteers as a direct result of the work of faculty receiving federal funds within this planned program.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	28000	30063

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
302	Nutrient Utilization in Animals
311	Animal Diseases
313	Internal Parasites in Animals
301	Reproductive Performance of Animals
306	Environmental Stress in Animals
315	Animal Welfare/Well-Being and Protection
303	Genetic Improvement of Animals
307	Animal Management Systems
305	Animal Physiological Processes
312	External Parasites and Pests of Animals

Outcome #2

1. Outcome Measures

Number of Master Cattlemen certifications granted through this planned program.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	60	130

3c. Qualitative Outcome or Impact Statement

Report Date 03/09/2009 Page 36 of 133

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
315	Animal Welfare/Well-Being and Protection
302	Nutrient Utilization in Animals
305	Animal Physiological Processes
301	Reproductive Performance of Animals
303	Genetic Improvement of Animals
307	Animal Management Systems
313	Internal Parasites in Animals
306	Environmental Stress in Animals
311	Animal Diseases
312	External Parasites and Pests of Animals

Outcome #3

1. Outcome Measures

Increase in the farm gate value of livestock production in Georiga. Reported in millions of dollars.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	1018	1266

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
306	Environmental Stress in Animals
313	Internal Parasites in Animals
307	Animal Management Systems
315	Animal Welfare/Well-Being and Protection
311	Animal Diseases
303	Genetic Improvement of Animals
302	Nutrient Utilization in Animals
301	Reproductive Performance of Animals

Report Date 03/09/2009 Page 37 of 133

305	Animal Physiological Processes
312	External Parasites and Pests of Animals

Outcome #4

1. Outcome Measures

Number of invited presentations by faculty as a direct result of the success of this program.

2. Associated Institution Types

- •1862 Extension
- •1862 Research

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual	
2007	7	4	

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
312	External Parasites and Pests of Animals
305	Animal Physiological Processes
313	Internal Parasites in Animals
307	Animal Management Systems
303	Genetic Improvement of Animals
315	Animal Welfare/Well-Being and Protection
301	Reproductive Performance of Animals
302	Nutrient Utilization in Animals
311	Animal Diseases
306	Environmental Stress in Animals

Outcome #5

1. Outcome Measures

Percentage of program participants reporting increased knowledge after program participation.

2. Associated Institution Types

•1862 Extension

Report Date 03/09/2009 Page 38 of 133

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual	
2007	75	0	

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
303	Genetic Improvement of Animals
305	Animal Physiological Processes
301	Reproductive Performance of Animals
312	External Parasites and Pests of Animals
311	Animal Diseases
307	Animal Management Systems
302	Nutrient Utilization in Animals
306	Environmental Stress in Animals
315	Animal Welfare/Well-Being and Protection
313	Internal Parasites in Animals

Outcome #6

1. Outcome Measures

Percentage of program participants responding to follow-up survey that indicate changing at least one production practice as a result of this program.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	60	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

Report Date 03/09/2009 Page 39 of 133

4. Associated Knowledge Areas

KA Code	Knowledge Area
303	Genetic Improvement of Animals
305	Animal Physiological Processes
306	Environmental Stress in Animals
302	Nutrient Utilization in Animals
315	Animal Welfare/Well-Being and Protection
313	Internal Parasites in Animals
307	Animal Management Systems
301	Reproductive Performance of Animals
312	External Parasites and Pests of Animals
311	Animal Diseases

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Public Policy changes
- Government Regulations
- Competing Programatic Challenges
- Populations changes (immigration,new cultural groupings,etc.)

Brief Explanation

Public policy on biofuel and impact on landuse, food supply, and feed supply. Government regulations on meat inspection. General down-turn in economy meant less money for new enterprises.

Drought, high feed prices and marketing sitautions from milk didersions and pooling.

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- After Only (post program)
- Retrospective (post program)
- Before-After (before and after program)
- During (during program)
- Case Study
- Comparisons between program participants (individuals, group, organizations) and non-participants
- Comparisons between different groups of individuals or program participants experiencing different levels of program intensity.
- Comparison between locales where the program operates and sites without program intervention
- Other (Comparing results to standard practices)

Evaluation Results

Number of new enterprises established - 9; Number of new enterprises in business after two years - 7; Number of profitable enterprises after five years-1.

Data show that feeding 12% soybean oil compared to 6% decreased the proportion of milk saturated fatty acids and increased the proportions of monounsaturated fat and linoleic acid without affecting. Milk yield, protein, lactose and fat contents were not affected.

Key Items of Evaluation

Report Date 03/09/2009 Page 40 of 133

Program #6

V(A). Planned Program (Summary)

1. Name of the Planned Program

Consumer Economics and Financial Literacy

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area		%1890 Extension	%1862 Research	%1890 Research
607	Consumer Economics	48%	48%	0%	0%
801	Individual and Family Resource Management	35%	35%	0%	0%
802	Human Development and Family Well-Being	10%	10%	0%	0%
804	Human Environmental Issues Concerning Apparel, Textiles,	7%	7%	0%	0%
	Total	100%	100%	0%	0%

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Exter	Extension Research		esearch
	1862	1890	1862	1890
Plan	1.0	1.1	0.0	0.0
Actual	2.0	1.1	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
165357	251202	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
165357	251202	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

In this program, UGA specialists disseminated personal financial literacy fact sheets, provided personal financial management education classes to agents and select clientele, and provided information that was disseminated by agents to media outlets.

In collaboration with our extension partners and stakeholders, FVSU faculty developed a long range plan for early intervention in financial, literacy and consumer education in targeted areas throughout the state of Georgia.

Monthly training of trainers in financial literacy and consumer education were conducted. Resources and materials from like-minded consumer advocacy organizations were disseminated as appropriate. The program targeted consumer advocacy organizations and form partnerships with approximately fifty (50) additional collaborators for program goal enhancement, program funding and coalition.

Report Date 03/09/2009 Page 41 of 133

2. Brief description of the target audience

Specialists directed efforts primarily to county agents. As a result, agents were able to reach youth, parents, senior citizens and others.

The targeted audiences of the FVSU faculty were all Georgians and residents in surrounding areas with emphasis on all limited resource and low income families and individuals.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
ı arget	ı arget	ı arget	Target
750	3000	200	500
821	37673	430	1487
	Adults Target 750	Adults Adults Target Target 750 3000	AdultsAdultsYouthTargetTargetTarget7503000200

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year Target

Plan: 0 2007: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan			
2007	3	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

• Number of educational contact hours generated from formal educational programs presented to county extension agents by st

Year	Target	Actual
2007	130	651

Output #2

Output Measure

Number of educational contact hours generated from formal educational programs presented directly to clientele by state facul

Year	Target	Actua
2007	66	3

Output #3

Output Measure

Number of significant publications including referred journals articles, bulletins and extension publications.

Year	Target	Actual
2007	7	11

Report Date 03/09/2009 Page 42 of 133

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O No.	Outcome Name
1	Percentage of program participants reporting an increase in skills proficiency in financial management and consumer education.
2	Percentage of program participants reporting behavioral changes in financial literacy skills, knowledge and aptitude.
3	Number of additional direct extension contacts made by volunteers, staff, or county agents not receiving federal funds as a direct outcome of the work of federally funded faculty associated with this planned program.
4	Number of invited presentations by faculty as a direct result of the success of this program.

Report Date 03/09/2009 Page 43 of 133

Outcome #1

1. Outcome Measures

Percentage of program participants reporting an increase in skills proficiency in financial management and consumer education.

2. Associated Institution Types

- •1862 Extension
- •1890 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	75	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management
804	Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures
802	Human Development and Family Well-Being
607	Consumer Economics

Outcome #2

1. Outcome Measures

Percentage of program participants reporting behavioral changes in financial literacy skills, knowledge and aptitude.

2. Associated Institution Types

- •1862 Extension
- •1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	65	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Report Date 03/09/2009 Page 44 of 133

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management
802	Human Development and Family Well-Being
804	Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures
607	Consumer Economics

Outcome #3

1. Outcome Measures

Number of additional direct extension contacts made by volunteers, staff, or county agents not receiving federal funds as a direct outcome of the work of federally funded faculty associated with this planned program.

2. Associated Institution Types

- •1862 Extension
- •1890 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	6000	6059

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
804	Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures
607	Consumer Economics
801	Individual and Family Resource Management
802	Human Development and Family Well-Being

Outcome #4

1. Outcome Measures

Number of invited presentations by faculty as a direct result of the success of this program.

2. Associated Institution Types

•1862 Extension

Report Date 03/09/2009 Page 45 of 133

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	1	4

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
607	Consumer Economics
801	Individual and Family Resource Management
804	Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures
802	Human Development and Family Well-Being

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Public Policy changes

Brief Explanation

$\mathbf{V}(\mathbf{I})$. Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- After Only (post program)
- Retrospective (post program)
- Before-After (before and after program)
- Case Study

Evaluation Results

Key Items of Evaluation

Report Date 03/09/2009 Page 46 of 133

Program #7

V(A). Planned Program (Summary)

1. Name of the Planned Program

Poultry Production and Protection

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
301	Reproductive Performance of Animals	20%	0%	20%	0%
305	Animal Physiological Processes	10%	0%	10%	0%
306	Environmental Stress in Animals	10%	0%	10%	0%
307	Animal Management Systems	30%	0%	30%	0%
311	Animal Diseases	20%	0%	20%	0%
315	Animal Welfare/Well-Being and Protection	10%	0%	10%	0%
	Total	100%	0%	100%	0%

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Exter	nsion	R	esearch
	1862	1890	1862	1890
Plan	1.5	0.0	2.0	0.0
Actual	4.0	0.0	2.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
330716	0	353180	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
330716	0	353180	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Report Date 03/09/2009 Page 47 of 133

Field research was conducted to develop improved energy efficiency techniques. Educational meetings were conducted with poultry farmers and poultry industry representatives. Educational materials concerning energy efficiency and conservation were prepared to distribute directly to every poultry producer in Georgia.

Educational meetings about bird health were conducted with poultry farmers and poultry industry representatives. Educational materials were prepared to distribute directly to every poultry producer in Georgia. Mass media information was prepared to educate the public about the risk, or lack thereof, of avian influenza and human health.

Through research, faculty developed management methods to improve egg production, fertility and hatchability. New information on management methods was extended to the Georgia poultry industry.

2. Brief description of the target audience

The target audience of this planned program included county extension agents, poultry producers, and poultry company professionals.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	150	1200	200	0
2007	355	1820	0	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year Target Plan: 0

2007: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Pe	eer Reviewed Publication	ns	
	Extension	Research	Total
Plan			
2007	0	0	0

V(F). State Defined Outputs

Output Target

Report Date 03/09/2009 Page 48 of 133

Output #1

Output Measure

Number of educational contact hours generated from formal educational programs presented to county extension agents by st

Year	Target	Actua
2007	50	9

Output #2

Output Measure

• Number of educational contact hours generated from formal educational programs presented directly to clientele by state facul

Year	Target	Actua
2007	150	36

Output #3

Output Measure

Number of significant publications including referred journals articles, bulletins and extension publications.

Year	Target	Actual
2007	7	24

Report Date 03/09/2009 Page 49 of 133

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O No.	Outcome Name
1	Percentage of program participants reporting increased knowledge after program participation.
2	Percentage of program participants who indicated a plan to adopt one or more of the practices recommended in this program.
3	Number of invited presentations by faculty as a direct result of the success of this program.
4	Increase in the farm gate value of poultry production in Georgia. Value reported annually in millions of dollars.

Report Date 03/09/2009 Page 50 of 133

Outcome #1

1. Outcome Measures

Percentage of program participants reporting increased knowledge after program participation.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	75	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
311	Animal Diseases
306	Environmental Stress in Animals
301	Reproductive Performance of Animals
307	Animal Management Systems
305	Animal Physiological Processes
315	Animal Welfare/Well-Being and Protection

Outcome #2

1. Outcome Measures

Percentage of program participants who indicated a plan to adopt one or more of the practices recommended in this program.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	65	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Report Date 03/09/2009 Page 51 of 133

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area	
307	Animal Management Systems	
311	Animal Diseases	
315	Animal Welfare/Well-Being and Protection	
306	Environmental Stress in Animals	
301	Reproductive Performance of Animals	
305	Animal Physiological Processes	

Outcome #3

1. Outcome Measures

Number of invited presentations by faculty as a direct result of the success of this program.

2. Associated Institution Types

•1862 Research

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	4	21

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
301	Reproductive Performance of Animals
311	Animal Diseases
307	Animal Management Systems
315	Animal Welfare/Well-Being and Protection
305	Animal Physiological Processes
306	Environmental Stress in Animals

Outcome #4

1. Outcome Measures

Increase in the farm gate value of poultry production in Georgia. Value reported annually in millions of dollars.

Report Date 03/09/2009 Page 52 of 133

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	4750	5432

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
301	Reproductive Performance of Animals
305	Animal Physiological Processes
307	Animal Management Systems
311	Animal Diseases
306	Environmental Stress in Animals
315	Animal Welfare/Well-Being and Protection

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Government Regulations
- Competing Programatic Challenges

Brief Explanation

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Retrospective (post program)
- Before-After (before and after program)
- During (during program)
- Case Study

Evaluation Results

Key Items of Evaluation

Report Date 03/09/2009 Page 53 of 133

Program #8

V(A). Planned Program (Summary)

1. Name of the Planned Program

Aquaculture

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
123	Management and Sustainability of Forest Resources	12%	12%	0%	12%
131	Alternative Uses of Land	18%	18%	0%	18%
307	Animal Management Systems	27%	27%	0%	27%
311	Animal Diseases	15%	15%	0%	15%
312	External Parasites and Pests of Animals	10%	10%	0%	10%
601	Economics of Agricultural Production and Farm Management	11%	11%	0%	11%
604	Marketing and Distribution Practices	7%	7%	0%	7%
	Total	100%	100%	0%	100%

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Exter	nsion	R	esearch
	1862	1890	1862	1890
Plan	0.8	0.8	0.0	0.5
Actual	1.6	1.0	0.0	1.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c 1890 Extension		Hatch	Evans-Allen
132286	239242	0	94228
1862 Matching	1890 Matching	1862 Matching	1890 Matching
132286	239242	0	94228
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Report Date 03/09/2009 Page 54 of 133

Workshops were held on the topics of catfish production and freshwater prawn production that included distribution of detailed reference material. Publications were written to update existing catfish production and freshwater prawn production literature. Assistance was given to at least 4 catfish processors in Georgia for plant development, market development, or supply development. Aquaculture product promotion and marketing were conducted to more than 6,000 consumers at the Sunbelt Exposition. The Georgia Aquaculture Association newsletter was edited and published biannually. The UGA Aquaculture website was maintained to include aquaculture information and events.

Disease diagnosis services were provided to producers. Disease diagnosis and treatment recommendations were given along with informative publications. Water quality and aquatic weed identification services were also provided. Workshops, presentations, newsletters, agriculture field days and tours of the greenhouse facilities were centered on the issues of aquatic animal disease, identification, treatment and prevention.

Workshops were held on different types of aquaculture production systems, especially re-circulating aquaculture systems (RAS). Workshops were held on best management practices for RAS, water quality management, aquatic animal health management, nutrition and feeding in RAS. Training on cage culture system management, species and site selection, water quality management, aeration and other topics were also conducted. Training material, fact sheets, newsletters and other publications were prepared on the management and culture of aquatic animals in different aquaculture production systems.

2. Brief description of the target audience

Georgia farmers and citizens who plan to enter the aquaculture business or are already in business. Catfish processing plant operators and their clients were helped directly and through county extension agents. County extension agents were trained at workshops and update meetings.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	120	600	800	0
2007	2007 510 300 1769		200	

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year Target Plan: 0

2007: 0

Patents listed

3. Publications (Standard General Output Measure)

Number	of Pee	r Rev	/iev	ved I	Publications	
		_		-		

	Extension	Research	Total
Plan			
2007	0	0	0

V(F). State Defined Outputs

Output Target

Report Date 03/09/2009 Page 55 of 133

Output #1

Output Measure

Number of significant publications including referred journals articles, bulletins and extension publications.

Year	Target	Actua
2007	4	10

Output #2

Output Measure

Number of educational contact hours generated from formal educational programs presented to county extension agents by st

Year	Target	Actua
2007	80	97

Output #3

Output Measure

Number of educational contact hours generated from formal educational programs presented directly to clientele by state facul

Year	Target	Actua	
2007	20	28	

Report Date 03/09/2009 Page 56 of 133

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O No.	Outcome Name
1	Number of additional direct extension contacts made by volunteers, staff, or county agents not receiving federal funds as a direct outcome of the work of federally funded faculty associated with this planned program.
2	Number of invited presentations by faculty as a direct result of the success of this program.
3	Percentage of program participants reporting an increase in skills proficiency in aquatic animal management and apuatic production systems.
4	Percentage of program participants who indicated a plan to adopt one or more of the practices recommended for proper aquatic management.
5	Number of pond acres in catfish production in Georgia reported annually.
6	Increase in the farm gate value of catfish production in Georgia. Reported annually in millions of dollars.

Report Date 03/09/2009 Page 57 of 133

Outcome #1

1. Outcome Measures

Number of additional direct extension contacts made by volunteers, staff, or county agents not receiving federal funds as a direct outcome of the work of federally funded faculty associated with this planned program.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual	
2007	700	1708	

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources
311	Animal Diseases
601	Economics of Agricultural Production and Farm Management
307	Animal Management Systems
312	External Parasites and Pests of Animals
131	Alternative Uses of Land
604	Marketing and Distribution Practices

Outcome #2

1. Outcome Measures

Number of invited presentations by faculty as a direct result of the success of this program.

2. Associated Institution Types

•1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	2	2

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Report Date 03/09/2009 Page 58 of 133

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
131	Alternative Uses of Land
307	Animal Management Systems
312	External Parasites and Pests of Animals
311	Animal Diseases
601	Economics of Agricultural Production and Farm Management
123	Management and Sustainability of Forest Resources
604	Marketing and Distribution Practices

Outcome #3

1. Outcome Measures

Percentage of program participants reporting an increase in skills proficiency in aquatic animal management and apuatic production systems.

2. Associated Institution Types

•1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual	
2007	75	2	

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
307	Animal Management Systems
604	Marketing and Distribution Practices
123	Management and Sustainability of Forest Resources
311	Animal Diseases
312	External Parasites and Pests of Animals
131	Alternative Uses of Land
601	Economics of Agricultural Production and Farm Management

Outcome #4

1. Outcome Measures

Percentage of program participants who indicated a plan to adopt one or more of the practices recommended for proper aquatic management.

Report Date 03/09/2009 Page 59 of 133

2. Associated Institution Types

•1890 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	65	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
307	Animal Management Systems
604	Marketing and Distribution Practices
312	External Parasites and Pests of Animals
123	Management and Sustainability of Forest Resources
131	Alternative Uses of Land
601	Economics of Agricultural Production and Farm Management
311	Animal Diseases

Outcome #5

1. Outcome Measures

Number of pond acres in catfish production in Georgia reported annually.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	2300	2708

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

Report Date 03/09/2009 Page 60 of 133

4. Associated Knowledge Areas

KA Code	Knowledge Area
131	Alternative Uses of Land
604	Marketing and Distribution Practices
307	Animal Management Systems
312	External Parasites and Pests of Animals
601	Economics of Agricultural Production and Farm Management
123	Management and Sustainability of Forest Resources
311	Animal Diseases

Outcome #6

1. Outcome Measures

Increase in the farm gate value of catfish production in Georgia. Reported annually in millions of dollars.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	0	5

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
131	Alternative Uses of Land
307	Animal Management Systems
312	External Parasites and Pests of Animals
311	Animal Diseases
601	Economics of Agricultural Production and Farm Management
123	Management and Sustainability of Forest Resources
604	Marketing and Distribution Practices

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Competing Programatic Challenges
- Populations changes (immigration,new cultural groupings,etc.)
- Other (Fuel Costs)

Report Date 03/09/2009 Page 61 of 133

Brief Explanation

V(I). Planned Program (Evaluation Studies and Data Collection)

- 1. Evaluation Studies Planned
 - After Only (post program)
 - Retrospective (post program)
 - During (during program)
 - Comparisons between program participants (individuals, group, organizations) and non-participants

Evaluation Results

Key Items of Evaluation

Report Date 03/09/2009 Page 62 of 133

Program #9

V(A). Planned Program (Summary)

1. Name of the Planned Program

Quality Caregiving for Children and Youth

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
801	Individual and Family Resource Management	6%	6%	0%	0%
802	Human Development and Family Well-Being	72%	72%	0%	0%
803	Sociological and Technological Change Affecting Individuals,	5%	5%	0%	0%
805	Community Institutions, Health, and Social Services	5%	5%	0%	0%
806	Youth Development	12%	12%	0%	0%
	Total	100%	100%	0%	0%

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Exter	nsion	R	esearch
	1862	1890	1862	1890
Plan	1.0	1.4	0.0	0.0
Actual	2.0	1.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
165358	239240	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
165358	239240	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

The planned program offered various programs on enhancing parenting/caregiving skills and provided information on health, home maintenance and community services. The program also offered conferences for senior citizens, childcare providers and youth. The family life program worked with other local, state and federal programs to disseminate information to the public.

The planned program disseminated parenting fact sheets, age-paced newsletters, and information on early brain development, provided parenting and child care provider education classes to agents and to select clientele based on identified needs. It provided information to be disseminated by agents to print and broadcast media outlets.

2. Brief description of the target audience

Report Date 03/09/2009 Page 63 of 133

Specialists directed efforts primarily to educating and preparing county agents. As a result, agents were able to reach parents, guardians, grandparents, child care providers, and other caregivers of children and youth.

The planned program also directly targeted limited resources individuals and families.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

Year	Direct Contacts Adults Target	Indirect Contacts Adults Target	Direct Contacts Youth Target	Indirect Contacts Youth Target
Plan	150	200	200	25
2007	195	300	869	100

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year Target Plan: 0

2007: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan			
2007	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

Number of educational contact hours generated from formal educational programs presented to county extension agents by st

Year	Target	Actual
2007	200	124

Output #2

Output Measure

Number of significant publications including referred journals articles, bulletins and extension publications.

Year	Target	Actual	
2007	3	2	

Output #3

Output Measure

Number of educational contact hours generated from formal educational programs presented directly to clientele.

Year	Target	Actual
2007	{No Data Entered}	1909

Report Date 03/09/2009 Page 64 of 133

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O No.	Outcome Name	
1	Percentage of program participants reporting increased knowledge after program participation.	
2	Percentage of program participants who indicated a plan to adopt one or more of the practices recommended in this program.	
3	Number of additional direct extension contacts made by volunteers, staff, or county agents not receiving federal funds as a direct outcome of the work of federally funded faculty associated with this planned program.	

Report Date 03/09/2009 Page 65 of 133

Outcome #1

1. Outcome Measures

Percentage of program participants reporting increased knowledge after program participation.

2. Associated Institution Types

- •1862 Extension
- •1890 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	75	75

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
802	Human Development and Family Well-Being
805	Community Institutions, Health, and Social Services
803	Sociological and Technological Change Affecting Individuals, Families and Communities
806	Youth Development
801	Individual and Family Resource Management

Outcome #2

1. Outcome Measures

Percentage of program participants who indicated a plan to adopt one or more of the practices recommended in this program.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	65	55

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Report Date 03/09/2009 Page 66 of 133

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
805	Community Institutions, Health, and Social Services
803	Sociological and Technological Change Affecting Individuals, Families and Communities
802	Human Development and Family Well-Being
801	Individual and Family Resource Management
806	Youth Development

Outcome #3

1. Outcome Measures

Number of additional direct extension contacts made by volunteers, staff, or county agents not receiving federal funds as a direct outcome of the work of federally funded faculty associated with this planned program.

2. Associated Institution Types

- •1862 Extension
- •1890 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual	
2007	20000	14170	

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management
803	Sociological and Technological Change Affecting Individuals, Families and Communities
805	Community Institutions, Health, and Social Services
806	Youth Development
802	Human Development and Family Well-Being

V(H). Planned Program (External Factors)

External factors which affected outcomes

Report Date 03/09/2009 Page 67 of 133

- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programatic Challenges
- Populations changes (immigration,new cultural groupings,etc.)

Brief Explanation

Session attendance could be lower due the economic impact on clietele's ability to attend workshops.

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- After Only (post program)
- Before-After (before and after program)

Evaluation Results

Key Items of Evaluation

Report Date 03/09/2009 Page 68 of 133

Program #10

V(A). Planned Program (Summary)

1. Name of the Planned Program

Plant Production and Protection

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
102	Soil, Plant, Water, Nutrient Relationships	6%	0%	6%	6%
203	Plant Biological Efficiency and Abiotic Stresses Affecting Plan	2%	0%	2%	2%
204	Plant Product Quality and Utility (Preharvest)	6%	0%	6%	6%
205	Plant Management Systems	14%	0%	14%	14%
206	Basic Plant Biology	8%	0%	8%	8%
211	Insects, Mites, and Other Arthropods Affecting Plants	7%	0%	7%	7%
212	Pathogens and Nematodes Affecting Plants	27%	0%	27%	27%
213	Weeds Affecting Plants	8%	0%	8%	8%
215	Biological Control of Pests Affecting Plants	8%	0%	8%	8%
216	Integrated Pest Management Systems	14%	0%	14%	14%
	Total	100%	0%	100%	100%

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Extension		Research	
	1862	1890	1862	1890
Plan	8.0	0.5	12.0	2.0
Actual	16.0	0.0	10.4	0.3

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
1323401	0	1836538	23557
1862 Matching	1890 Matching	1862 Matching	1890 Matching
1323401	0	1836538	23557
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Report Date 03/09/2009 Page 69 of 133

Publications in the form of journal articles, station bulletins and extension publications were written. In addition, oral and poster presentations were made at scientific conferences. Oral presentations, field displays and written reports were made to growers and other stakeholders at county meetings, statewide field days, and at commodity meetings.

Research projects were carried out in the laboratory, the greenhouse, on experimental farms, and in collaboration with commercial producers. Findings were published in the peer-reviewed literature and presented at scientific congresses and regional producer-oriented meetings. In collaboration with extension faculty, new management guidelines were developed, evaluated and disseminated.

In this program, specialists disseminated information on new procedures and technologies through education classes to agents and select clientele and provided information to be disseminated by county extension agents to media outlets.

2. Brief description of the target audience

Greenhouse operators, farmers, county extension agents, seed companies, chemical companies, industry representatives, turfgrass professionals, general public

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

Year	Direct Contacts Adults Target	Indirect Contacts Adults Target	Direct Contacts Youth Target	Indirect Contacts Youth Target
Plan	19590	50000	0	0
2007	10619	112910	570	5090

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year Target

Plan: 5 2007: 0

Patents listed

3. Publications (Standard General Output Measure)

N	lumbe	r of	Peer	Rev	riew	ed	Publ	icat	ions

	Extension	Research	Total
Plan			
2007	0	0	0

V(F). State Defined Outputs

Output Target

Report Date 03/09/2009 Page 70 of 133

Output #1

Output Measure

Number of significant publications including referred journals articles, bulletins and extension publications.

Year	Target	Actua
2007	225	251

Output #2

Output Measure

Number of educational contact hours generated from formal educational programs presented to county extension agents by st

Year	Target	Actua	
2007	1140	2411	

Output #3

Output Measure

Number of educational contact hours generated from formal educational programs presented directly to clientele by state facul

Year	Target	Actua
2007	2200	14595

Output #4

Output Measure

Number of disease samples processed by diagnostic laboratory.

Year	Target	Actual
2007	6000	2699

Report Date 03/09/2009 Page 71 of 133

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O No.	Outcome Name
1	Number of additional direct extension contacts made by volunteers, staff, or county agents not receiving federal
2	funds as a direct outcome of the work of federally funded faculty associated with this planned program. Number of invited presentations by faculty as a direct result of the success of this program.
3	Number of Master Gardener certifications granted through this program.
4	
	Increase in farm gate value of row and forage crops in Georgia. Reported annually in millions of dollars.
5	Increase in farm gate value of fruit and nut crops in Georgia. Reported annually in millions of dollars.
6	Increase in farm gate value of vegetable crops in Georgia. Reported annually in millions of dollars.
7	Increase in farm gate value of ornamental horticulture crops in Georgia. Reported annually in millions of dollars.
8	Percentage of program participants reporting increased knowledge after program participation.
9	Percentage of program participants who indicated a plan to adopt one or more of the practices recommended in this
	program.

Report Date 03/09/2009 Page 72 of 133

Outcome #1

1. Outcome Measures

Number of additional direct extension contacts made by volunteers, staff, or county agents not receiving federal funds as a direct outcome of the work of federally funded faculty associated with this planned program.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	110000	125821

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
206	Basic Plant Biology
211	Insects, Mites, and Other Arthropods Affecting Plants
205	Plant Management Systems
212	Pathogens and Nematodes Affecting Plants
203	Plant Biological Efficiency and Abiotic Stresses Affecting Plants
213	Weeds Affecting Plants
216	Integrated Pest Management Systems
102	Soil, Plant, Water, Nutrient Relationships
204	Plant Product Quality and Utility (Preharvest)
215	Biological Control of Pests Affecting Plants

Outcome #2

1. Outcome Measures

Number of invited presentations by faculty as a direct result of the success of this program.

2. Associated Institution Types

- •1862 Extension
- •1862 Research

Report Date 03/09/2009 Page 73 of 133

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	20	2

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems
211	Insects, Mites, and Other Arthropods Affecting Plants
212	Pathogens and Nematodes Affecting Plants
213	Weeds Affecting Plants
204	Plant Product Quality and Utility (Preharvest)
102	Soil, Plant, Water, Nutrient Relationships
203	Plant Biological Efficiency and Abiotic Stresses Affecting Plants
215	Biological Control of Pests Affecting Plants
216	Integrated Pest Management Systems
206	Basic Plant Biology

Outcome #3

1. Outcome Measures

Number of Master Gardener certifications granted through this program.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	500	580

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

Report Date 03/09/2009 Page 74 of 133

4. Associated Knowledge Areas

KA Code	Knowledge Area
206	Basic Plant Biology
211	Insects, Mites, and Other Arthropods Affecting Plants
213	Weeds Affecting Plants
215	Biological Control of Pests Affecting Plants
205	Plant Management Systems
212	Pathogens and Nematodes Affecting Plants
204	Plant Product Quality and Utility (Preharvest)
102	Soil, Plant, Water, Nutrient Relationships
203	Plant Biological Efficiency and Abiotic Stresses Affecting Plants
216	Integrated Pest Management Systems

Outcome #4

1. Outcome Measures

Increase in farm gate value of row and forage crops in Georgia. Reported annually in millions of dollars.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	1740	1681

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems
102	Soil, Plant, Water, Nutrient Relationships
216	Integrated Pest Management Systems
206	Basic Plant Biology
212	Pathogens and Nematodes Affecting Plants
203	Plant Biological Efficiency and Abiotic Stresses Affecting Plants
211	Insects, Mites, and Other Arthropods Affecting Plants
204	Plant Product Quality and Utility (Preharvest)
215	Biological Control of Pests Affecting Plants
213	Weeds Affecting Plants

Outcome #5

1. Outcome Measures

Increase in farm gate value of fruit and nut crops in Georgia. Reported annually in millions of dollars.

Report Date 03/09/2009 Page 75 of 133

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	227	894

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
211	Insects, Mites, and Other Arthropods Affecting Plants
216	Integrated Pest Management Systems
215	Biological Control of Pests Affecting Plants
204	Plant Product Quality and Utility (Preharvest)
206	Basic Plant Biology
203	Plant Biological Efficiency and Abiotic Stresses Affecting Plants
205	Plant Management Systems
213	Weeds Affecting Plants
212	Pathogens and Nematodes Affecting Plants
102	Soil, Plant, Water, Nutrient Relationships

Outcome #6

1. Outcome Measures

Increase in farm gate value of vegetable crops in Georgia. Reported annually in millions of dollars.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	725	894

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Report Date 03/09/2009 Page 76 of 133

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
203	Plant Biological Efficiency and Abiotic Stresses Affecting Plants
215	Biological Control of Pests Affecting Plants
204	Plant Product Quality and Utility (Preharvest)
213	Weeds Affecting Plants
211	Insects, Mites, and Other Arthropods Affecting Plants
216	Integrated Pest Management Systems
102	Soil, Plant, Water, Nutrient Relationships
205	Plant Management Systems
212	Pathogens and Nematodes Affecting Plants
206	Basic Plant Biology

Outcome #7

1. Outcome Measures

Increase in farm gate value of ornamental horticulture crops in Georgia. Reported annually in millions of dollars.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year Quantitative Target		Actua	
2007	656	770	

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
204	Plant Product Quality and Utility (Preharvest)
211	Insects, Mites, and Other Arthropods Affecting Plants
203	Plant Biological Efficiency and Abiotic Stresses Affecting Plants
212	Pathogens and Nematodes Affecting Plants
206	Basic Plant Biology
213	Weeds Affecting Plants
215	Biological Control of Pests Affecting Plants
216	Integrated Pest Management Systems
102	Soil, Plant, Water, Nutrient Relationships
205	Plant Management Systems

Outcome #8

Report Date 03/09/2009 Page 77 of 133

1. Outcome Measures

Percentage of program participants reporting increased knowledge after program participation.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	80	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
216	Integrated Pest Management Systems
213	Weeds Affecting Plants
204	Plant Product Quality and Utility (Preharvest)
212	Pathogens and Nematodes Affecting Plants
211	Insects, Mites, and Other Arthropods Affecting Plants
205	Plant Management Systems
102	Soil, Plant, Water, Nutrient Relationships
203	Plant Biological Efficiency and Abiotic Stresses Affecting Plants
206	Basic Plant Biology
215	Biological Control of Pests Affecting Plants

Outcome #9

1. Outcome Measures

Percentage of program participants who indicated a plan to adopt one or more of the practices recommended in this program.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	65	100

3c. Qualitative Outcome or Impact Statement

Report Date 03/09/2009 Page 78 of 133

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
203	Plant Biological Efficiency and Abiotic Stresses Affecting Plants
213	Weeds Affecting Plants
215	Biological Control of Pests Affecting Plants
216	Integrated Pest Management Systems
206	Basic Plant Biology
102	Soil, Plant, Water, Nutrient Relationships
204	Plant Product Quality and Utility (Preharvest)
205	Plant Management Systems
211	Insects, Mites, and Other Arthropods Affecting Plants
212	Pathogens and Nematodes Affecting Plants

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy

Brief Explanation

$\mathbf{V}(\mathbf{I})$. Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- After Only (post program)
- Before-After (before and after program)
- During (during program)

Evaluation Results

20% of growers surveyed in the state adopted the alternative methyl bromide application procedure.

Key Items of Evaluation

Report Date 03/09/2009 Page 79 of 133

Program #11

V(A). Planned Program (Summary)

1. Name of the Planned Program

Youth Life Skill Development

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
307	Animal Management Systems	5%	5%	0%	0%
315	Animal Welfare/Well-Being and Protection	5%	5%	0%	0%
608	Community Resource Planning and Development	5%	5%	0%	0%
802	Human Development and Family Well-Being	15%	15%	0%	0%
806	Youth Development	70%	70%	0%	0%
	Total	100%	100%	0%	0%

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Exter	nsion	Research	
	1862	1890	1862	1890
Plan	2.5	1.2	0.0	0.0
Actual	5.0	1.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Exter	nsion	Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
413394	239240	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
413394	239240	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Report Date 03/09/2009 Page 80 of 133

4-H faculty members developed curriculum, trained and supported county extension agents to conduct monthly educational programs for in-school club meetings around the state.

4-H faculty members developed and supported educational opportunities including individual learning projects, animal projects, entrepreneurship clubs, science clubs, environmental clubs and product evaluation/judging activities.

The 4-H Youth program developed curriculum and trained staff to conduct a summer camping program that allows young people to learn and practice life skills. Five residential camps were supported through the work of this program.

The 4-H Youth program conducted a Georgia Youth Summit with youth and adult teams preparing information on local issues, receiving training on enacting change and working together and returning to home communities to enact the change. State federally funded faculty provided in-service training and web based information for county faculty, staff, and volunteers for working with youth in civic engagement. They trained 4-H issue ambassadors to work on community change during ambassador training and prepared complimentary information for ambassadors to use as reference. State faculty trained youth and adults to work with communities on meeting the needs of suddenly military youth and families under the direction of the Operation Military Kids Team. Faculty members produced and provided web based training and information for directing and assisting youth in individualized community engagement with recognition within the Leadership in Action program.

A large part of this program funded specialists and their direct efforts primarily to county agents. These agents then disseminated this information to youth in their county.

2. Brief description of the target audience

The target audience for this planned program included two groups. County agents and volunteers were targeted to multiply the efforts of faculty associated with this program. In many cases, faculty had direct contact with the youth.

All Georgia youth from Kindergarten through college were targeted for life skill development programs. The in-school club program targeted 5th through 8th grades. Different activities within the program targeted different ages.

Many programs identified more specific audiences. An example of these would be programs that targeted youth of military families or programs that targeted audiences at risk. Some programs targeted low-income and limited resource families.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	1350	2000	4890	5000
2007	2565	1750	4011	6740

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year Target Plan: 0

2007: 0

Patents listed

Report Date 03/09/2009 Page 81 of 133

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan			
2007	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

• Number of educational contact hours generated from formal educational programs presented to county extension agents by st

Year	Target	Actual
2007	750	945

Output #2

Output Measure

Number of educational contact hours generated from formal educational programs presented directly to clientele by state facul

Year	Target	Actua	
2007	200	205	

Output #3

Output Measure

Number of significant publications including referred journals articles, bulletins and extension publications.

Year	Target	Actual
2007	6	19

Report Date 03/09/2009 Page 82 of 133

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O No.	Outcome Name
1	Number of additional direct extension contacts made by volunteers, staff, or county agents not receiving federal
	funds as a direct outcome of the work of federally funded faculty associated with this planned program.
2	Percentage of program participants reporting increased knowledge after program participation.

Report Date 03/09/2009 Page 83 of 133

Outcome #1

1. Outcome Measures

Number of additional direct extension contacts made by volunteers, staff, or county agents not receiving federal funds as a direct outcome of the work of federally funded faculty associated with this planned program.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	150000	515286

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development
315	Animal Welfare/Well-Being and Protection
802	Human Development and Family Well-Being
307	Animal Management Systems
608	Community Resource Planning and Development

Outcome #2

1. Outcome Measures

Percentage of program participants reporting increased knowledge after program participation.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual	
2007	80	0	

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Report Date 03/09/2009 Page 84 of 133

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
315	Animal Welfare/Well-Being and Protection
608	Community Resource Planning and Development
802	Human Development and Family Well-Being
806	Youth Development
307	Animal Management Systems

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Government Regulations
- Competing Public priorities
- Populations changes (immigration,new cultural groupings,etc.)

Brief Explanation

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Retrospective (post program)
- Time series (multiple points before and after program)

Evaluation Results

Key Items of Evaluation

Report Date 03/09/2009 Page 85 of 133

Program #12

V(A). Planned Program (Summary)

1. Name of the Planned Program

Housing and the Near Environment

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
801 804	Individual and Family Resource Management	30%	30%	0%	0%
004	Human Environmental Issues Concerning Apparel, Textiles,	70%	70%	0%	0%
	Total	100%	100%	0%	0%

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Extension		Research	
	1862	1890	1862	1890
Plan	1.0	1.0	0.0	0.0
Actual	2.0	1.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
165358	239240	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
165358	239240	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Report Date 03/09/2009 Page 86 of 133

Faculty developed and disseminated information on indoor air quality, water quality, waste management and energy management.

The homebuyer education program helped consumers gain the knowledge they will need to become successful homeowners. This includeed ensuring that participants have an understanding of the buying process, mortgages, financial management, and how to prevent foreclosure and default. The program also included education in maintaining a safe, clean and healthy home environment. All graduates of the classes received a certificate of completion that is recognized by state agencies as a tool for them to qualify for down payment and mortgage assistance. An additional component of this program was to also disseminate information to our target audience on various resources available to assist our target audience transition from a rental to homeownership relationship, in addition to helping this audience overcome self-imposed barriers that can prevent them from transitioning.

Faculty also developed training and educational materials for non-federally funded agents to utilize with clients in their communities on home buying. Faculty developed and disseminated information on indoor air quality, water quality, waste management and energy management. Faculty promoted Extension as a resource for housing education information to housing and community organizations.

2. Brief description of the target audience

The primary audience for the federally funded specialist was the county agent. The county agents take the information into the communities where it is disseminated to the general public.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

Year	Direct Contacts Adults Target	Indirect Contacts Adults Target	Direct Contacts Youth Target	Indirect Contacts Youth Target
Plan	400	15000	60	0
2007	369	15200	104	9

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year Target Plan: 0

2007:

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

Extension		Research	Total	
Plan				
2007	0	0	0	

V(F). State Defined Outputs

Output Target

Report Date 03/09/2009 Page 87 of 133

Output #1

Output Measure

Number of educational contact hours generated from formal educational programs presented to county extension agents by st

Year	Target	Actua
2007	1235	1455

Output #2

Output Measure

Number of educational contact hours generated from formal educational programs presented directly to clientele by state facul

Year	Target	Actua
2007	100	157

Output #3

Output Measure

Number of significant publications including referred journals articles, bulletins and extension publications.

Year	Target	Actual
2007	10	5

Report Date 03/09/2009 Page 88 of 133

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O No.	Outcome Name
1	Number of additional direct extension contacts made by volunteers, staff, or county agents not receiving federal
	funds as a direct outcome of the work of federally funded faculty associated with this planned program.
2	The percentage of participants who increased their knowledge of Indoor Air Qquality issues as a result of the educational programs conducted by county agents.
3	The percentage of participants who tested their homes for indoor air quality contaminants as a result of the educational programs conducted by county agents.
4	The percentage of participants who indicated a change in behavior, such as conserving water, purchasing Energy Star products or testing their well.
5	Total number of consumers transitioning from rental to homeownership after participating in this program.

Report Date 03/09/2009 Page 89 of 133

Outcome #1

1. Outcome Measures

Number of additional direct extension contacts made by volunteers, staff, or county agents not receiving federal funds as a direct outcome of the work of federally funded faculty associated with this planned program.

2. Associated Institution Types

- •1862 Extension
- •1890 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	120000	62790

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
804	Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures
801	Individual and Family Resource Management

Outcome #2

1. Outcome Measures

The percentage of participants who increased their knowledge of Indoor Air Qquality issues as a result of the educational programs conducted by county agents.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	80	95

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Report Date 03/09/2009 Page 90 of 133

What has been done

Results

4. Associated Knowledge Areas

KA Code Knowledge Area

801 Individual and Family Resource Management

804 Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures

Outcome #3

1. Outcome Measures

The percentage of participants who tested their homes for indoor air quality contaminants as a result of the educational programs conducted by county agents.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	40	32

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management
804	Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures

Outcome #4

1. Outcome Measures

The percentage of participants who indicated a change in behavior, such as conserving water, purchasing Energy Star products or testing their well.

2. Associated Institution Types

•1862 Extension

Report Date 03/09/2009 Page 91 of 133

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	40	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management
804	Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures

Outcome #5

1. Outcome Measures

Total number of consumers transitioning from rental to homeownership after participating in this program.

2. Associated Institution Types

•1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	7	5

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management
804	Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures

Report Date 03/09/2009 Page 92 of 133

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Populations changes (immigration,new cultural groupings,etc.)

Brief Explanation

The downturn in economy has contributed to clientele seeking out the trainings in housing in hopes of gaining knowlege to help prevent evictions.

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

During (during program)

Evaluation Results

Key Items of Evaluation

Report Date 03/09/2009 Page 93 of 133

Program #13

V(A). Planned Program (Summary)

1. Name of the Planned Program

Sustainability and Profitability of Agriculture

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
102	Soil, Plant, Water, Nutrient Relationships	4%	4%	4%	4%
205	Plant Management Systems	10%	10%	10%	10%
307	Animal Management Systems	10%	10%	10%	10%
601	Economics of Agricultural Production and Farm Management	20%	20%	20%	20%
602	Business Management, Finance, and Taxation	10%	10%	10%	10%
603	Market Economics	20%	20%	20%	20%
604	Marketing and Distribution Practices	10%	10%	10%	10%
605	Natural Resource and Environmental Economics	10%	10%	10%	10%
610	Domestic Policy Analysis	3%	3%	3%	3%
611	Foreign Policy and Programs	3%	3%	3%	3%
	Total	100%	100%	100%	100%

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Exter	nsion	Research	
	1862	1890	1862	1890
Plan	6.0	0.9	4.0	2.5
Actual	12.0	0.9	4.0	9.5

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
992146	215316	706360	895163
1862 Matching	1890 Matching	1862 Matching	1890 Matching
992146	215316	706360	895163
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Report Date 03/09/2009 Page 94 of 133

Faculty analyzed specific management strategies, improved financial accounting and reporting systems, examined the impacts of change in farm structure and public policies.

Faculty investigated alternate cultural practices that will protect, improve and maintain soil fertility required for sustainable crop production. Minimum tillage and cover crops were tested as alternatives to conventional tillage and commercial fertilizers.

The Center for Urban Agriculture identified and addressed issues concerning agriculture that evolve within the urban community. They investigated issues and formed collaborations of faculty to address the issues.

Faculty investigated and disseminated information on value-added products or production practices that can improve sustainability and profitability.

Faculty investigated niche markets. An example was the development of a niche market in Georgia for goat meat. Some faculty worked on specialty plants with medicinal, nutrceutical and biofuel values.

Faculty provided educational information, training materials and resources to county extension agents used in their county programs. As research faculty developed new products, new technology or better management practices, the communication and understanding of this information becomes a critical component of future sustainability.

2. Brief description of the target audience

The traget audience for this program included all areas of agriculture including greenhouse operators, growers, farmers, livestock producres, county extension agents, seed companies, chemical companies, industry representatives, turfgrass professionals and the general public.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

Year	Direct Contacts Adults Target	Indirect Contacts Adults Target	Direct Contacts Youth Target	Indirect Contacts Youth Target
Plan	8200	10000	0	0
2007	5950	2055600	150	2000

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year Target Plan: 0

2007: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan			
2007	0	0	0

V(F). State Defined Outputs

Output Target

Report Date 03/09/2009 Page 95 of 133

Output #1

Output Measure

Number of educational contact hours generated from formal educational programs presented directly to clientele by state facul

Year	Target	Actua
2007	550	7190

Output #2

Output Measure

• Number of educational contact hours generated from formal educational programs presented to county extension agents by st

Year	Target	Actua
2007	350	1346

Output #3

Output Measure

Number of significant publications including referred journals articles, bulletins and extension publications.

Year	Target	Actual
2007	12	26

Report Date 03/09/2009 Page 96 of 133

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O No.	Outcome Name
1	Percentage of program participants reporting increased knowledge after program participation.
2	Percentage of program participants responding to follow-up survey that have adopt one or more of the practices recommended in this program.
3	Percentage of program participants responding to survey that indicated an increase in income using information from this program.

Report Date 03/09/2009 Page 97 of 133

Outcome #1

1. Outcome Measures

Percentage of program participants reporting increased knowledge after program participation.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	75	65

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
603	Market Economics
610	Domestic Policy Analysis
611	Foreign Policy and Programs
205	Plant Management Systems
602	Business Management, Finance, and Taxation
307	Animal Management Systems
102	Soil, Plant, Water, Nutrient Relationships
604	Marketing and Distribution Practices
605	Natural Resource and Environmental Economics
601	Economics of Agricultural Production and Farm Management

Outcome #2

1. Outcome Measures

Percentage of program participants responding to follow-up survey that have adopt one or more of the practices recommended in this program.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	55	0

3c. Qualitative Outcome or Impact Statement

Report Date 03/09/2009 Page 98 of 133

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
307	Animal Management Systems
602	Business Management, Finance, and Taxation
604	Marketing and Distribution Practices
603	Market Economics
205	Plant Management Systems
601	Economics of Agricultural Production and Farm Management
610	Domestic Policy Analysis
611	Foreign Policy and Programs
605	Natural Resource and Environmental Economics

Outcome #3

1. Outcome Measures

Percentage of program participants responding to survey that indicated an increase in income using information from this program.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	50	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems
102	Soil, Plant, Water, Nutrient Relationships
604	Marketing and Distribution Practices
611	Foreign Policy and Programs
603	Market Economics
307	Animal Management Systems
601	Economics of Agricultural Production and Farm Management
602	Business Management, Finance, and Taxation

Report Date 03/09/2009 Page 99 of 133

605	Natural Resource and Environmental Economics
610	Domestic Policy Analysis

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Government Regulations
- Competing Public priorities
- Populations changes (immigration,new cultural groupings,etc.)

Brief Explanation

$V(\mbox{I}).$ Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- After Only (post program)
- During (during program)
- Case Study

Evaluation Results

Key Items of Evaluation

Report Date 03/09/2009 Page 100 of 133

Program #14

V(A). Planned Program (Summary)

1. Name of the Planned Program

Agriculture and Food Defence Program / Agrosecurity

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
133	Pollution Prevention and Mitigation	5%	0%	0%	0%
212	Pathogens and Nematodes Affecting Plants	15%	0%	0%	0%
306	Environmental Stress in Animals	5%	0%	0%	0%
311	Animal Diseases	28%	0%	0%	0%
314	Toxic Chemicals, Poisonous Plants, Naturally Occuring Toxir	2%	0%	0%	0%
315	Animal Welfare/Well-Being and Protection	5%	0%	0%	0%
608	Community Resource Planning and Development	15%	0%	0%	0%
712	Protect Food from Contamination by Pathogenic Microorgani	10%	0%	0%	0%
722	Zoonotic Diseases and Parasites Affecting Humans	5%	0%	0%	0%
723	Hazards to Human Health and Safety	10%	0%	0%	0%
	Total	100%	0%	0%	0%

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Extension		Research	
	1862	1890	1862	1890
Plan	1.0	0.0	0.0	0.0
Actual	1.0	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
82678	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
82678	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Monthly Committee on Agriculture & Food Defense meetings of key stakeholders were conducted &/or supported.

Animals-in-Disaster planning templates were developed. State Agriculture Response Team planning meetings were conducted that included Extension professionals. A Homeland Security Information Network portal was created to augment communications.

Report Date 03/09/2009 Page 101 of 133

2. Brief description of the target audience

University, and state and local government agencies, and industry were trained for prevention and response capabilities. The general public received awareness education. A large part of this program funded specialists and their direct efforts primarily to county agents. These agents then disseminated this information to the appropriate audience in their counties.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

Year	Direct Contacts Adults Target	Indirect Contacts Adults Target	Direct Contacts Youth Target	Indirect Contacts Youth Target
Plan	200	1000	0	0
2007	270	2000	0	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year Target

Plan: 0 2007: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan			
2007	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

Number of educational contact hours generated from formal educational programs presented to county extension agents by st

Year	Target	Actua
2007	1800	0

Output #2

Output Measure

Number of educational contact hours generated from formal educational programs presented directly to clientele by state facul

Year	Target	Actual
2007	1000	390

Output #3

Output Measure

Number of significant publications including referred journals articles, bulletins and extension publications.

Year	Target	Actual
2007	4	6

Report Date 03/09/2009 Page 102 of 133

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O No.	Outcome Name	
1	Number of additional direct extension contacts made by volunteers, staff, or county agents not receiving federal funds as a direct outcome of the work of federally funded faculty associated with this planned program.	
2	Percentage of program participants reporting increased knowledge after program participation.	
3	County Agriculture Response Teams or county agriculture emergency plans created.	

Report Date 03/09/2009 Page 103 of 133

Outcome #1

1. Outcome Measures

Number of additional direct extension contacts made by volunteers, staff, or county agents not receiving federal funds as a direct outcome of the work of federally funded faculty associated with this planned program.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual	
2007	26000	10604	

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
311	Animal Diseases
315	Animal Welfare/Well-Being and Protection
723	Hazards to Human Health and Safety
608	Community Resource Planning and Development
212	Pathogens and Nematodes Affecting Plants
314	Toxic Chemicals, Poisonous Plants, Naturally Occuring Toxins, and Other Hazards Affecting Animals
133	Pollution Prevention and Mitigation
306	Environmental Stress in Animals
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occuring Toxi
722	Zoonotic Diseases and Parasites Affecting Humans

Outcome #2

1. Outcome Measures

Percentage of program participants reporting increased knowledge after program participation.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	80	45

3c. Qualitative Outcome or Impact Statement

Report Date 03/09/2009 Page 104 of 133

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occuring Toxi
133	Pollution Prevention and Mitigation
315	Animal Welfare/Well-Being and Protection
311	Animal Diseases
306	Environmental Stress in Animals
608	Community Resource Planning and Development
722	Zoonotic Diseases and Parasites Affecting Humans
723	Hazards to Human Health and Safety
212	Pathogens and Nematodes Affecting Plants
314	Toxic Chemicals, Poisonous Plants, Naturally Occuring Toxins, and Other Hazards Affecting Animals

Outcome #3

1. Outcome Measures

County Agriculture Response Teams or county agriculture emergency plans created.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	10	4

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
315	Animal Welfare/Well-Being and Protection
722	Zoonotic Diseases and Parasites Affecting Humans
608	Community Resource Planning and Development
314	Toxic Chemicals, Poisonous Plants, Naturally Occuring Toxins, and Other Hazards Affecting Animals
133	Pollution Prevention and Mitigation
212	Pathogens and Nematodes Affecting Plants
306	Environmental Stress in Animals
311	Animal Diseases

Report Date 03/09/2009 Page 105 of 133

712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occuring Toxi
723	Hazards to Human Health and Safety

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Competing Public priorities

Brief Explanation

At the beginning of the period, more work was expected to be accomplished for the development of new State Agriculture Response Teams. However, external programmatic changes occured that necessitated redirecting efforts to development of Animals-in-Disaster planning workshops and materials.

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

Before-After (before and after program)

Evaluation Results

Student evaluations were performed before and after Agrosecurity Awareness trainings to ascertain program effectiveness. Also, an After Action Report for participation in the South Georgia Fires was performed.

Key Items of Evaluation

Report Date 03/09/2009 Page 106 of 133

Program #15

V(A). Planned Program (Summary)

1. Name of the Planned Program

Managing Water, Energy, Waste and Air Quality in Agriculture

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
101	Appraisal of Soil Resources	4%	0%	4%	4%
102	Soil, Plant, Water, Nutrient Relationships	7%	0%	7%	7%
104	Protect Soil from Harmful Effects of Natural Elements	7%	0%	7%	7%
111	Conservation and Efficient Use of Water	13%	0%	13%	13%
112	Watershed Protection and Management	17%	0%	17%	17%
131	Alternative Uses of Land	7%	0%	7%	7%
133	Pollution Prevention and Mitigation	21%	0%	21%	21%
141	Air Resource Protection and Management	7%	0%	7%	7%
403	Waste Disposal, Recycling, and Reuse	13%	0%	13%	13%
511	New and Improved Non-Food Products and Processes	4%	0%	4%	4%
	Total	100%	0%	100%	100%

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Exter	Extension Research		esearch
	1862	1890	1862	1890
Plan	8.5	0.5	11.0	1.2
Actual	16.0	0.0	11.0	0.7

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c 1890 Extension		Hatch	Evans-Allen
1405540	0	1942491	65959
1862 Matching	1890 Matching	1862 Matching	1890 Matching
1405540	0	1942491	65959
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Report Date 03/09/2009 Page 107 of 133

Knowledge in environmental sciences was improved by applied and basic research studies and by dissemination of results through journal articles, conferences, and professional meetings. Extension outputs to improve public understanding of environmental management consisted of bulletins, flyers, short courses, meetings, and web pages related to implementation of environmental management programs.

Georgia was actively involved in regional and national efforts consistent with the goals of our water quality programs. We led the regional efforts in animal waste management and were involved with numerous state, regional, and national efforts in this area. Research projects and educational efforts were developed to address nutrient management, animal waste management and irrigation water management under the agricultural pollution control program. In the rural environmental protection area, drinking water was a primary focus along with wastewater management. There was also a focus on watershed management. Many parts of the water quality program reached audiences beyond the agricultural community including support for communities and local governments.

Both new and enhanced processes for treatment and utilization of animal manures was provided to producers through extension and continuing education activities. Applied research projects were conducted to develop methods to manage or reduce ammonia emissions in poultry production.

A large part of this program funded specialists and their direct efforts primarily to county agents. These agents then disseminated this information to the appropriate target audiences at the local level.

2. Brief description of the target audience

The primary target audiences were county extension agents, growers, industry representatives, consultants, contractors, media, regulatory and policy representatives, community leaders,

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

Year	Direct Contacts Adults Target	Indirect Contacts Adults Target	Direct Contacts Youth Target	Indirect Contacts Youth Target
Plan	3100	15000	100	100
2007	2090	14800	272	720

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year Target

Plan: 1 2007: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan			
2007	0	0	0

V(F). State Defined Outputs

Output Target

Report Date 03/09/2009 Page 108 of 133

Output #1

Output Measure

Number of educational contact hours generated from formal educational programs presented to county extension agents by st

Year	Target	Actua
2007	305	552

Output #2

Output Measure

Number of educational contact hours generated from formal educational programs presented directly to clientele by state facul

Year	Target	Actua
2007	2785	2510

Output #3

Output Measure

Number of significant publications including referred journals articles, bulletins and extension publications.

Year	Target	Actual
2007	68	66

Report Date 03/09/2009 Page 109 of 133

V. State Defined Outcomes Table of Content

O No.	Outcome Name
1	Number of additional direct extension contacts made by volunteers, staff, or county agents not receiving federal
2	funds as a direct outcome of the work of federally funded faculty associated with this planned program. Percentage of program participants reporting increased knowledge after program participation.
3	Percentage of program participants who indicated a plan to adopt one or more of the practices recommended in this
	program.

Report Date 03/09/2009 Page 110 of 133

1. Outcome Measures

Number of additional direct extension contacts made by volunteers, staff, or county agents not receiving federal funds as a direct outcome of the work of federally funded faculty associated with this planned program.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	11000	37206

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
511	New and Improved Non-Food Products and Processes
112	Watershed Protection and Management
131	Alternative Uses of Land
133	Pollution Prevention and Mitigation
403	Waste Disposal, Recycling, and Reuse
141	Air Resource Protection and Management
101	Appraisal of Soil Resources
104	Protect Soil from Harmful Effects of Natural Elements
111	Conservation and Efficient Use of Water
102	Soil, Plant, Water, Nutrient Relationships

Outcome #2

1. Outcome Measures

Percentage of program participants reporting increased knowledge after program participation.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	80	0

3c. Qualitative Outcome or Impact Statement

Report Date 03/09/2009 Page 111 of 133

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
131	Alternative Uses of Land
141	Air Resource Protection and Management
101	Appraisal of Soil Resources
511	New and Improved Non-Food Products and Processes
102	Soil, Plant, Water, Nutrient Relationships
112	Watershed Protection and Management
133	Pollution Prevention and Mitigation
104	Protect Soil from Harmful Effects of Natural Elements
111	Conservation and Efficient Use of Water
403	Waste Disposal, Recycling, and Reuse

Outcome #3

1. Outcome Measures

Percentage of program participants who indicated a plan to adopt one or more of the practices recommended in this program.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	55	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
101	Appraisal of Soil Resources
131	Alternative Uses of Land
111	Conservation and Efficient Use of Water
403	Waste Disposal, Recycling, and Reuse
511	New and Improved Non-Food Products and Processes
141	Air Resource Protection and Management
112	Watershed Protection and Management
133	Pollution Prevention and Mitigation

Report Date 03/09/2009 Page 112 of 133

102	Soil, Plant, Water, Nutrient Relationships
104	Protect Soil from Harmful Effects of Natural Elements

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Public Policy changes
- Government Regulations
- Competing Programatic Challenges
- Populations changes (immigration,new cultural groupings,etc.)

Brief Explanation

Drought caused increased water conservation and decreased water quality programming.

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Retrospective (post program)
- During (during program)
- Case Study

Evaluation Results

Key Items of Evaluation

Report Date 03/09/2009 Page 113 of 133

Program #16

V(A). Planned Program (Summary)

1. Name of the Planned Program

New Product Development / Genomics and Cultivar Development

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
102	Soil, Plant, Water, Nutrient Relationships	0%	0%	4%	0%
133	Pollution Prevention and Mitigation	0%	0%	4%	0%
201	Plant Genome, Genetics, and Genetic Mechanisms	0%	0%	8%	0%
202	Plant Genetic Resources	0%	0%	31%	0%
203	Plant Biological Efficiency and Abiotic Stresses Affecting Plan	0%	0%	11%	0%
204	Plant Product Quality and Utility (Preharvest)	0%	0%	11%	0%
205	Plant Management Systems	0%	0%	19%	0%
206	Basic Plant Biology	0%	0%	4%	0%
212	Pathogens and Nematodes Affecting Plants	0%	0%	8%	0%
	Total	0%	0%	100%	0%

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Exter	nsion	Research	
	1862	1890	1862	1890
Plan	0.0	0.0	7.0	1.5
Actual	0.0	0.0	7.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c 1890 Extension		Hatch	Evans-Allen
0	0	1236131	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	0	1236131	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Report Date 03/09/2009 Page 114 of 133

- 1) Conducted basic and applied research to understand the genetics of traits of agronomic importance and the performance of potential genotypes under field conditions, with an emphasis on crops/plants of current or potential importance to Georgia
- 2) Developed new cultivars, with emphasis on plants of current or potential importance to Georgia, which manifest improved performance or manifest value-added traits.

2. Brief description of the target audience

Peer scientists and Extension Faculty.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	0	0	0	0
2007	0	0	0	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year Target Plan: 10
2007: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications					
	Extension	Research	Total		
Plan					
2007	0	0	0		

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

Number of significant publications including referred journals articles, bulletins and extension publications.

Year	Target	Actual
2007	48	59

Report Date 03/09/2009 Page 115 of 133

V. State Defined Outcomes Table of Content

O No.	Outcome Name
1	Release of new cultivars or germplasms

Report Date 03/09/2009 Page 116 of 133

1. Outcome Measures

Release of new cultivars or germplasms

2. Associated Institution Types

•1862 Research

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual	
2007	15	50	

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
204	Plant Product Quality and Utility (Preharvest)
205	Plant Management Systems
133	Pollution Prevention and Mitigation
201	Plant Genome, Genetics, and Genetic Mechanisms
203	Plant Biological Efficiency and Abiotic Stresses Affecting Plants
212	Pathogens and Nematodes Affecting Plants
206	Basic Plant Biology
202	Plant Genetic Resources
102	Soil, Plant, Water, Nutrient Relationships

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Public Policy changes
- Government Regulations
- Competing Public priorities

Brief Explanation

Severe drought eliminated most purchases of ornamental plants.

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Before-After (before and after program)
- During (during program)

Evaluation Results

Report Date 03/09/2009 Page 117 of 133

Key Items of Evaluation

Report Date 03/09/2009 Page 118 of 133

Program #17

V(A). Planned Program (Summary)

1. Name of the Planned Program

Urban Agriculture

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
102	Soil, Plant, Water, Nutrient Relationships	10%	0%	10%	0%
111	Conservation and Efficient Use of Water	15%	0%	15%	0%
124	Urban Forestry	10%	0%	10%	0%
202	Plant Genetic Resources	10%	0%	10%	0%
205	Plant Management Systems	10%	0%	10%	0%
211	Insects, Mites, and Other Arthropods Affecting Plants	10%	0%	10%	0%
212	Pathogens and Nematodes Affecting Plants	10%	0%	10%	0%
213	Weeds Affecting Plants	10%	0%	10%	0%
601	Economics of Agricultural Production and Farm Management	10%	0%	10%	0%
602	Business Management, Finance, and Taxation	5%	0%	5%	0%
	Total	100%	0%	100%	0%

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Exter	nsion	Research	
	1862	1890	1862	1890
Plan	2.0	0.0	1.0	0.0
Actual	4.0	0.0	1.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
330715	0	176590	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
330715	0	176590	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Report Date 03/09/2009 Page 119 of 133

Research was published in research publications. New information was shared through the Extension education program. This program included a breeding program that incorporates variability derived from interspecific hybrids to greatly enhance the genetic pool from which new cultivars can be developed. The genus Abelia contains approximately 30 species that potentially can be crossed to obtain hybrids with desired characteristics. Hybrids have been obtained from several of these species crosses and are undergoing evaluation. Improved cultivars from this program were released.

Faculty held several educational programs that focus not only on water conservation, but on specific examples that will support the economics of technology conversion, specific behavior training for employees, and specific water use monitoring procedures to support management decisions. Trade journal articles were written for the local area that supports these educational goals. The program hopes to have at least one grower agree to serve as a demonstration location where water conservation technology and training has been implemented.

Faculty conducted statewide and local trainings, programs on turf diseases identification and management. Publication of electronic and printed materials on turf diseases identification and management was published. Implementation of research trials to measure efficacy and proper timing of fungicides to control in different diseases was conducted.

Development of partnerships and research collaborations with commercial companies and educational institutions was established to support the work of this program. Faculty developed new cost estimating and job bidding software for landscape installation. New software to use with GPS devices was developed to support inventory systems.

Faculty supported the Master Gardener program by training county extension agents to conduct local programs. Faculty members worked with local county extension agents to support consumer educational efforts related to urban agriculture.

2. Brief description of the target audience

The target audience for this planned program included urban agriculture industries professionals, public policy makers and regulators, county Extension faculty, homeowners.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

Year	Direct Contacts Adults Target	Indirect Contacts Adults Target	Direct Contacts Youth Target	Indirect Contacts Youth Target
Plan	5000	300000	550	1000
2007	2218	302175	677	823

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year Target

Plan: 0 2007: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

Extension		Research	Total
Plan			
2007	0	0	0

Report Date 03/09/2009 Page 120 of 133

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

• Number of educational contact hours generated from formal educational programs presented to county extension agents by st

Year	Target	Actua
2007	700	361

Output #2

Output Measure

Number of educational contact hours generated from formal educational programs presented directly to clientele by state facul

Year	Target	Actua
2007	500	781

Output #3

Output Measure

Number of significant publications including referred journals articles, bulletins and extension publications.

Year	Target	Actual	
2007	15	15	

Report Date 03/09/2009 Page 121 of 133

V. State Defined Outcomes Table of Content

O No.	Outcome Name		
1	Percentage of program participants reporting increased knowledge after program participation.		
2	Percentage of program participants who indicated a plan to adopt one or more of the practices recommended in this program.		

Report Date 03/09/2009 Page 122 of 133

1. Outcome Measures

Percentage of program participants reporting increased knowledge after program participation.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual	
2007	75	89	

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
124	Urban Forestry
205	Plant Management Systems
202	Plant Genetic Resources
212	Pathogens and Nematodes Affecting Plants
111	Conservation and Efficient Use of Water
602	Business Management, Finance, and Taxation
211	Insects, Mites, and Other Arthropods Affecting Plants
213	Weeds Affecting Plants
102	Soil, Plant, Water, Nutrient Relationships
601	Economics of Agricultural Production and Farm Management

Outcome #2

1. Outcome Measures

Percentage of program participants who indicated a plan to adopt one or more of the practices recommended in this program.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual	
2007	55	88	

3c. Qualitative Outcome or Impact Statement

Report Date 03/09/2009 Page 123 of 133

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
601	Economics of Agricultural Production and Farm Management
124	Urban Forestry
205	Plant Management Systems
211	Insects, Mites, and Other Arthropods Affecting Plants
602	Business Management, Finance, and Taxation
111	Conservation and Efficient Use of Water
202	Plant Genetic Resources
212	Pathogens and Nematodes Affecting Plants
213	Weeds Affecting Plants
102	Soil, Plant, Water, Nutrient Relationships

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programatic Challenges

Brief Explanation

$\mathbf{V}(\mathbf{I})$. Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- After Only (post program)
- Before-After (before and after program)
- During (during program)
- Case Study

Evaluation Results

Key Items of Evaluation

Report Date 03/09/2009 Page 124 of 133

Program #18

V(A). Planned Program (Summary)

1. Name of the Planned Program

Speciality Plants Technology

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
136	Conservation of Biological Diversity	0%	0%	0%	5%
201	Plant Genome, Genetics, and Genetic Mechanisms	0%	0%	0%	5%
203	Plant Biological Efficiency and Abiotic Stresses Affecting Plan	0%	0%	0%	20%
204	Plant Product Quality and Utility (Preharvest)	0%	0%	0%	15%
205	Plant Management Systems	0%	0%	0%	10%
206	Basic Plant Biology	0%	0%	0%	10%
511	New and Improved Non-Food Products and Processes	0%	0%	0%	10%
701	Nutrient Composition of Food	0%	0%	0%	5%
724	Healthy Lifestyle	0%	0%	0%	10%
903	Communication, Education, and Information Delivery	0%	0%	0%	10%
	Total	0%	0%	0%	100%

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Exter	nsion	Research	
	1862	1890	1862	1890
Plan	0.0	0.0	0.0	2.0
Actual	0.0	0.0	0.0	2.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c 1890 Extension		Hatch	Evans-Allen
0	0	0	188456
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	0	0	188456
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Plant tissue samples were collected and prepared for culturing/plant regeneration, conservation and DNA analyses. Scutellaria plants were harvested, dried, and phytochemically analyzed and evaluated for medicinal bioactivity. Significant research results were disseminated through scientific channels.

Report Date 03/09/2009 Page 125 of 133

2. Brief description of the target audience

Peer scientists and Extension Faculty.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	0	0	0	0
2007	0	0	0	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year Target Plan: 0
2007: 0

Patents listed

3. Publications (Standard General Output Measure)

	Extension	Research	Total
Plan			
2007	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

Number of significant publications including referred journals articles, bulletins and extension publications.

Year	Target	Actual	
2007	2	13	

Report Date 03/09/2009 Page 126 of 133

V. State Defined Outcomes Table of Content

O No.	Outcome Name
1	

Report Date 03/09/2009 Page 127 of 133

1. Outcome Mea

Not reporting on this Outcome for this Annual Report

- 2. Associated Institution Types
- 3a. Outcome Type:
- 3b. Quantitative Outcome

Year Quantitative Target Actual

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code Knowledge Area

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programatic Challenges

Brief Explanation

Weather extremes slowed data acquisition.

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

•

Evaluation Results

Key Items of Evaluation

Report Date 03/09/2009 Page 128 of 133

Program #19

V(A). Planned Program (Summary)

1. Name of the Planned Program

Meat and Dairy Goat Production and Processing

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
307	Animal Management Systems	0%	0%	0%	20%
308	Improved Animal Products (Before Harvest)	0%	0%	0%	5%
311	Animal Diseases	0%	0%	0%	15%
501	New and Improved Food Processing Technologies	0%	0%	0%	5%
502	New and Improved Food Products	0%	0%	0%	5%
503	Quality Maintenance in Storing and Marketing Food Products	0%	0%	0%	10%
601	Economics of Agricultural Production and Farm Management	0%	0%	0%	5%
603	Market Economics	0%	0%	0%	5%
609	Economic Theory and Methods	0%	0%	0%	20%
712	Protect Food from Contamination by Pathogenic Microorgani	0%	0%	0%	10%
	Total	0%	0%	0%	100%

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	0.8	0.0	4.0
Actual	0.0	0.0	0.0	3.8

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Exter	nsion	Research		
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen	
0	0	0	353354	
1862 Matching	1890 Matching	1862 Matching	1890 Matching	
0	0	0	353354	
1862 All Other	1890 All Other	1862 All Other	1890 All Other	
0	0	0	0	

V(D). Planned Program (Activity)

1. Brief description of the Activity

Report Date 03/09/2009 Page 129 of 133

This program identified the niche market of goat meat. It identified the attributes and types of goat meat products. The program tapped efficient marketing channels of goat meat supply chain and evaluated the production efficiency. Studies conducted to examined the impact of goal production on the local economy.

Studies conducted to determined the effects of preslaughter dietary treatments on oxidation rate as well as nutritional, physicochemical and organoleptic properties of chevon-based value-added products. Additionally these studies determined the effects of preslaughter diet and duration of feeding on Escherichia coli and other enteric bacterial populations in rumen and rectum, and contamination of skin and carcass in goats. Studies conducted to determined the effects of preharvest spray washing on skin and carcass bacterial counts in goats and the effects of preharvest diet, feed deprivation, and spray washing on blood hormone and metabolite concentrations. Faculty disseminated the research findings through scientific and extension meetings, as well as through publications in journals and newsletters.

As a part of this program goat milk cheeses (i.e., Cheddar and Monterey Jack type), reduced fat/cholesterol cheeses, and infant formulas were developed. Food quality parameters and nutrient availability of the dairy goat products were evaluated. Faculty shared the results of the research by disseminating findings to the target audience including the scientific community in food and agricultural sciences, extension workers, goat enthusiasts, dairy producers and consumers through training courses, seminars, workshops, goat field day, e-mail communications, etc.

2. Brief description of the target audience

The scientific community in food and agricultural sciences, extension workers, food processors, goat enthusiasts, meat goat producers, and concusmers, dairy producers and consumers.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Target	Target	Target	Target
50	100	0	0
0	0	0	0
	Adults Target	Adults Adults Target Target	AdultsAdultsYouthTargetTargetTarget501000

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year Target Plan: 0

2007: 0

Patents listed

3. Publications (Standard General Output Measure)

	Extension	Research	Total
Plan			
2007	0	0	0

V(F). State Defined Outputs

Output Target Output #1

Output Measure

Number of significant publications including referred journals articles, bulletins and extension publications.

Year	Target	Actual
2007	2	4

Report Date 03/09/2009 Page 130 of 133

V. State Defined Outcomes Table of Content

O No.	Outcome Name
1	Number of research experiments completed on dairy goat products development, food quality and economic
	evaluation.

Report Date 03/09/2009 Page 131 of 133

1. Outcome Measures

Number of research experiments completed on dairy goat products development, food quality and economic evaluation.

2. Associated Institution Types

•1890 Research

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	1	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
501	New and Improved Food Processing Technologies
609	Economic Theory and Methods
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occuring Toxi
308	Improved Animal Products (Before Harvest)
502	New and Improved Food Products
311	Animal Diseases
503	Quality Maintenance in Storing and Marketing Food Products
601	Economics of Agricultural Production and Farm Management
307	Animal Management Systems
603	Market Economics

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Government Regulations

Brief Explanation

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

After Only (post program)

Evaluation Results

Report Date 03/09/2009 Page 132 of 133

Key Items of Evaluation

Report Date 03/09/2009 Page 133 of 133